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WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

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The University of Michigan Engineering Library

National Weather Summary

February 26 to March 3

HIGHLIGHTS: A major winter storm developed over the central and southern Plains and slowly moved northeastward. It produced widespread and locally heavy precipitation, gusty winds, and scattered deep snows from the Midwest into New England. The extreme chill and drifting snow caused some fatalities and hampered transportation and outdoor activities. Freezing temperatures dipped into northern Florida, while temperatures in some Georgia peach orchards got into the mid-20s. It was colder than usual across the Nation, except along the west coast and in the northern Plains. The central and eastern gulf coasts were very wet, while the Southwest remained dry.

SUNDAY...A storm system moving through the central Plains produced snow from eastern Colorado into Kansas, Missouri, western Oklahoma, and the Texas Panhandle. Heavy thunderstorms developed throughout eastern Texas and Oklahoma, and spread eastward to Georgia and Florida. Heavy snow began late in the day in Missouri and was mixed with rain in Arkansas, Tennessee, and Kentucky.

MONDAY...The storm system moved eastward into Tennessee and then northeastward. Light snow continued in the central and northern Plains. The storm produced precipitation over all of the East, from the Mississippi River to the Atlantic Coast. Showers and thunderstorms covered the southern and East Coast States to the Carolinas, while snow fell from Arkansas to northern Alabama and northeastward to New England. Heavy snow fell in the western Carolinas, West Virginia, and the middle Ohio Valley.

TUESDAY...Precipitation again fell in nearly all of the area east of the Mississippi River. Snow fell from northern Mississippi and Alabama, and through and west of the Appalachians. Heavy snow covered the area from western Pennsylvania and New York to western New England.

WEDNESDAY...The intense winter strom moved out of the Northeast into the Atlantic. Relatively light snow fell west of the Appalachians from Kentucky to New England and from the eastern Lake States to the mountains. Much colder air covered most of the eastern half of the Nation. Freezing temperatures reached to all but the edge of the gulf and Atlantic Coasts.

THURSDAY...New record-low temperatures were set in the coastal southeastern States, especially over much of Florida where freezing weather covered the northern third of the State. Central Georgia peach orchards registered temperatures in the mid-20s, thining some blooms. Precipitation was scattered across the Pacific Northwest, northern Rockies, and the Northeast. Warmer, springlike weather developed over south Texas.

FRIDAY...The warming trend continued over the southern Plains and Desert Southwest with some southernmost sites registering afternoon temperatures in the mid-80s. In contrast, a new surge of arctic air edged into the northwestern Great Lakes Region, sending morning readings to near zero. Abnormally cold air remained over New England. Precipitation was very light, still concentrated over the Northwest and the Northeast corner of the Nation.

(continued on p. 20)

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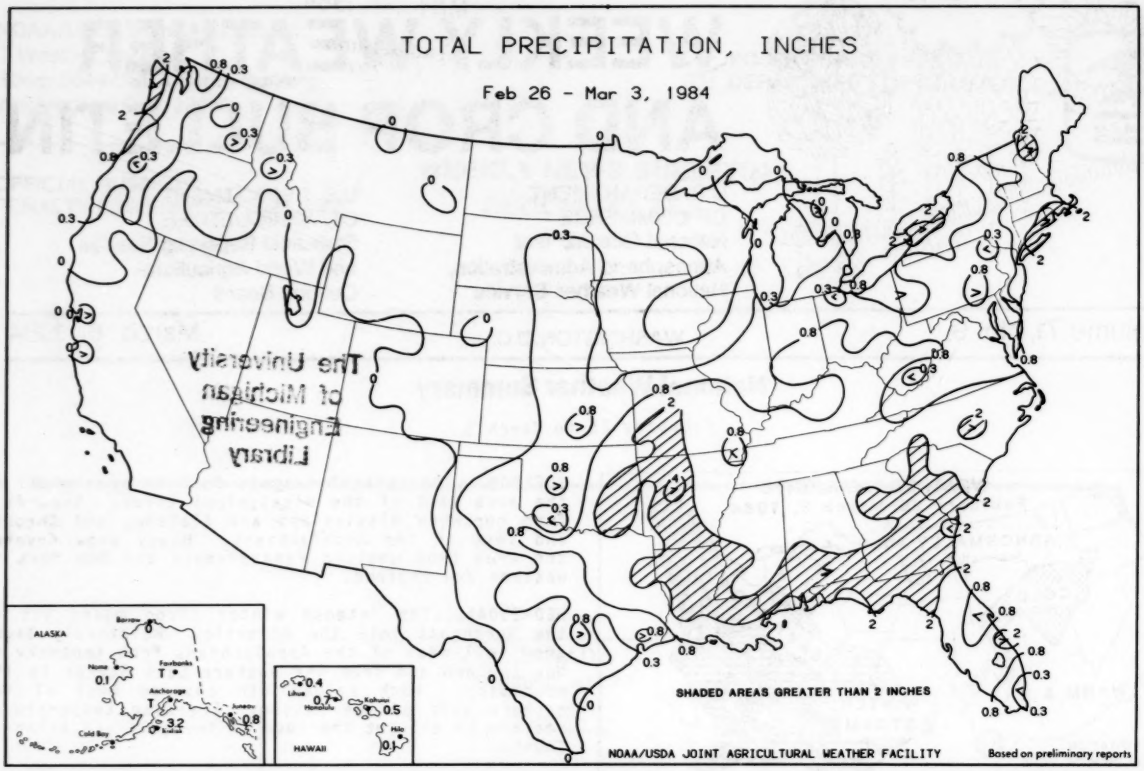
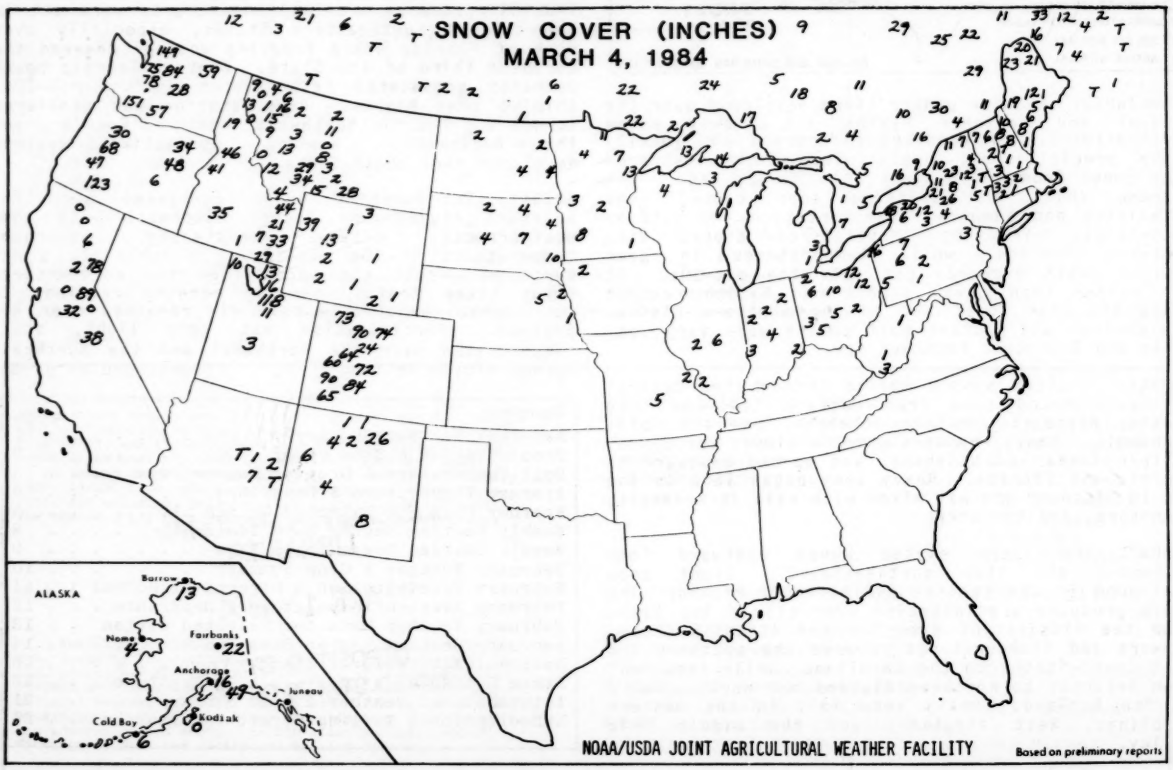
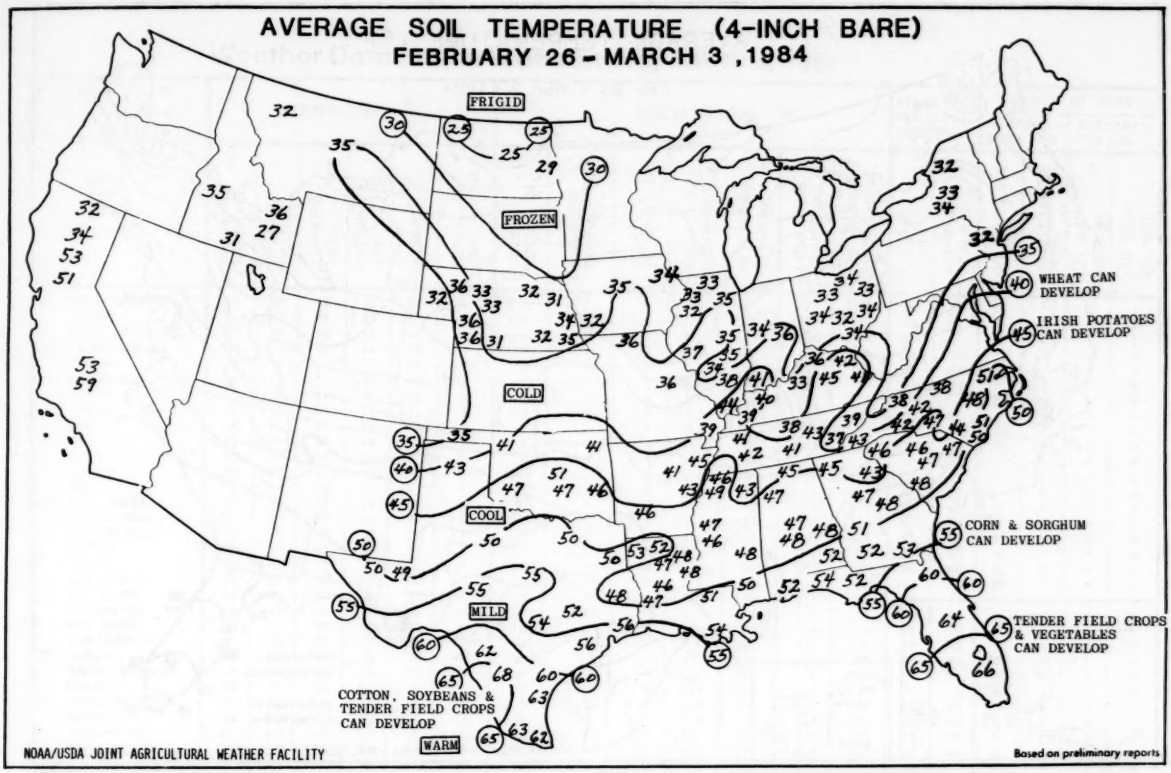
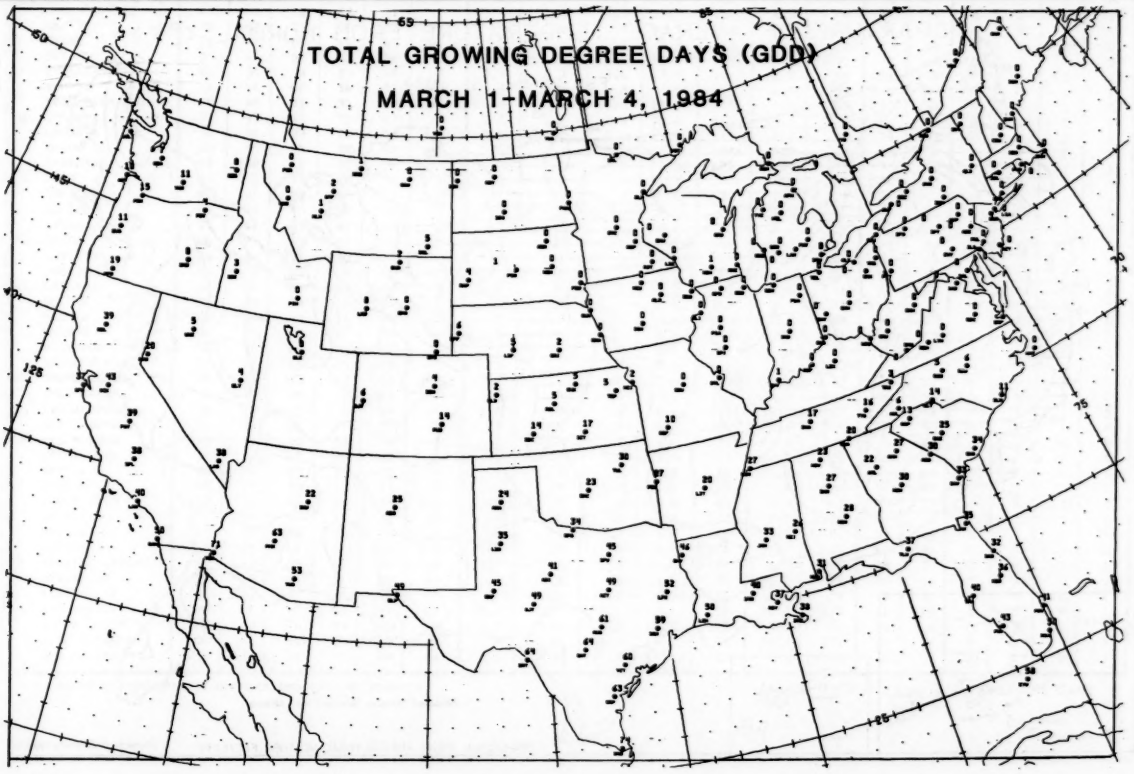
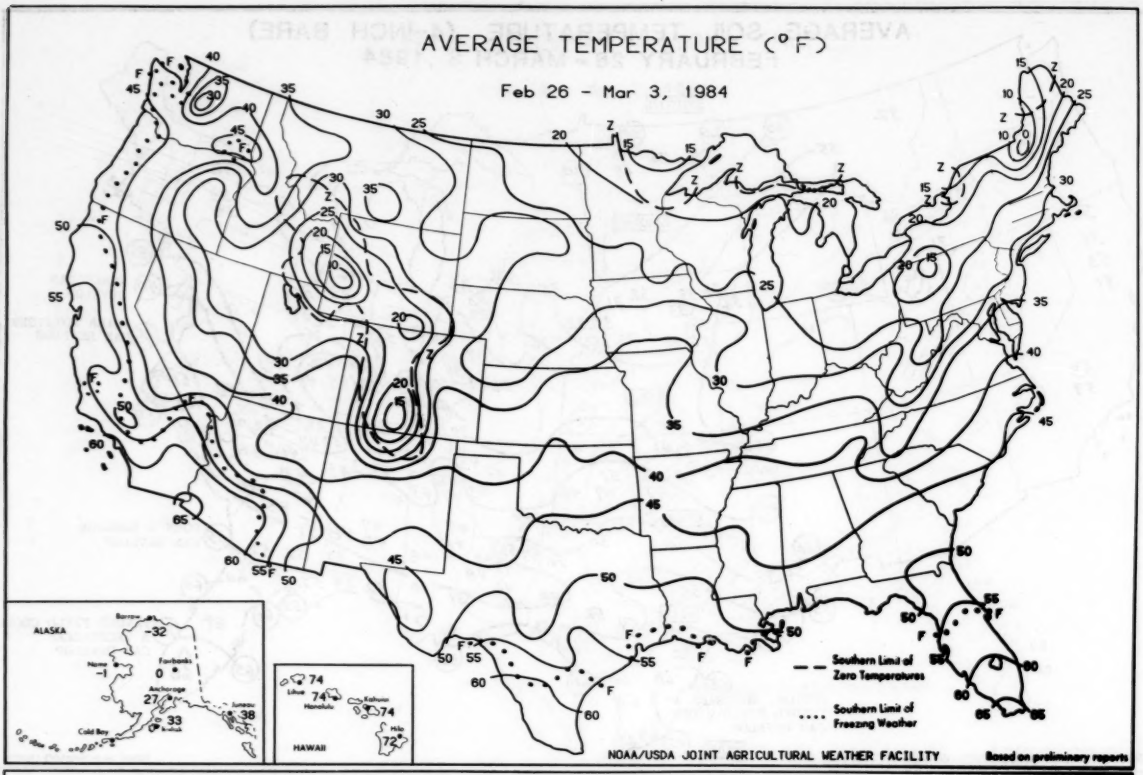
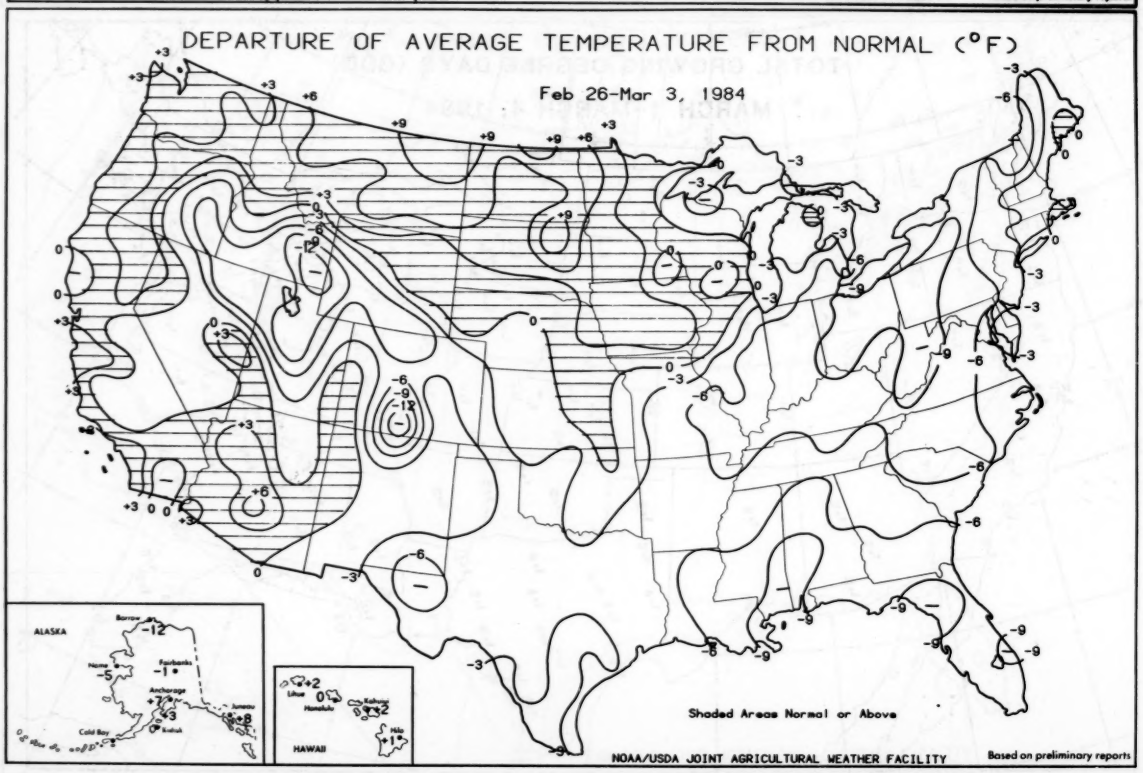

TOTAL PRECIPITATION, INCHES
Feb 26 - Mar 3, 1984
SHADED AREAS GREATER THAN 2 INCHES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports
ALASKA
HAWAII
The University of Michigan Engineering Library


SNOW COVER (INCHES)
MARCH 4, 1984
ALASKA
Barrow
Nome
Fairbanks
Anchorage
Juneau
Cold Bay
Kodiak
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE SOIL TEMPERATURE (4-INCH BARE)
FEBRUARY 26 - MARCH 3 ,1984
FRIGID
FROZEN
COLD
COOL
MILD
WARM
WHEAT CAN DEVELOP
IRISH POTATOES CAN DEVELOP
CORN & SORGHUM CAN DEVELOP
TENDER FIELD CROPS & VEGETABLES CAN DEVELOP
COTTON, SOYBEANS & TENDER FIELD CROPS CAN DEVELOP
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


TOTAL GROWING DEGREE DAYS (GDD)
MARCH 1-MARCH 4, 1984


AVERAGE TEMPERATURE (°F)
Feb 26 - Mar 3, 1984
ALASKA
HAWAII
Southern Limit of Zero Temperatures
Southern Limit of Freezing Weather
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
Feb 26-Mar 3, 1984
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Weather Data for the Week Ending MARCH 3, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE NOV 27	PCT. NORMAL SINCE NOV 27	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	55	30	67	22	42	-7	1.3	0	.9	23.6	145	7.2	67	84	39	0	5	4	1
MOBILE	59	35	71	27	47	-9	1.5	.1	1.4	20.3	122	11.0	106	84	42	0	3	2	1
MONTGOMERY	57	33	70	25	45	-8	1.5	.2	1.3	17.8	121	9.3	99	91	47	0	4	3	1
AK ANCHORAGE	33	21	40	14	27	7	T	- .2	T	2.8	97	2.3	144	74	52	0	7	1	0
BARROW	-30	-34	-26	-37	-32	-12	0	0	0	.3	60	.3	150	77	67	0	7	0	0
FAIRBANKS	11	-11	20	-26	0	-1	T	- .1	T	2.2	122	1.6	160	70	49	0	7	0	0
JUNEAU	42	34	47	31	38	8	.8	- .1	.5	13.0	97	12.4	155	99	64	0	2	5	0
KODIAK	37	29	40	18	33	3	3.2	2.0	1.0	24.6	110	17.2	112	93	76	0	5	7	2
NOME	8	-10	17	-28	-1	-5	.1	0	.1	2.4	109	.8	57	63	42	0	7	1	0
AZ PHOENIX	79	49	83	44	64	6	0	- .2	0	1.4	67	.3	25	37	13	0	0	0	0
PRESCOTT	62	27	66	21	44	3	0	- .4	0	1.3	24	0	0	39	11	0	6	0	0
TUCSON	73	40	77	29	57	1	0	- .2	0	1.1	48	.6	43	36	11	0	2	0	0
YUMA	79	50	84	47	65	3	0	- .1	0	1.0	77	.1	11	40	12	0	0	0	0
AR FORT SMITH	54	32	68	24	43	-3	1.7	.9	1.4	5.8	72	3.4	71	85	43	0	4	3	1
LITTLE ROCK	52	35	62	28	43	-4	1.9	.9	1.3	13.9	113	5.3	67	86	50	0	4	4	2
CA BAKERSFIELD	70	39	75	33	54	-1	0	- .2	0	1.4	47	.2	9	82	33	0	0	0	0
EUREKA	59	42	61	38	50	2	.2	- 1.1	.1	19.9	100	5.6	43	96	65	0	0	2	0
FRESNO	68	41	72	37	55	2	0	- .4	0	3.0	50	1.2	29	85	40	0	0	0	0
LOS ANGELES	70	51	79	47	60	3	0	- .5	0	2.4	32	.4	7	77	41	0	0	0	0
RED BLUFF	64	41	74	35	53	1	T	- .7	T	12.5	102	2.3	28	88	37	0	0	1	0
SACRAMENTO	65	43	70	36	54	2	0	- .6	0	5.2	49	1.2	16	90	46	0	0	0	0
SAN DIEGO	70	54	75	48	62	3	0	- .4	0	2.1	40	.6	16	78	40	0	0	0	0
SAN FRANCISCO	65	46	70	43	56	3	T	- .7	T	8.2	67	1.9	23	89	38	0	0	0	0
CO DENVER	43	21	54	9	32	-3	.2	0	.1	2.3	135	1.0	91	85	41	0	7	2	0
GRAND JUNCTION	50	28	57	24	39	1	0	- .1	0	2.1	140	.4	40	69	31	0	5	0	0
PUEBLO	53	17	68	10	35	-2	T	- .1	T	1.2	109	.3	43	77	25	0	7	1	0
CT BRIDGEPORT	37	26	43	21	32	-2	2.0	1.2	2.0	10.6	98	5.8	88	64	38	0	6	1	1
HARTFORD	35	21	44	16	28	-3	1.5	.6	1.5	13.6	111	6.7	91	78	42	0	7	2	1
DC WASHINGTON	43	29	49	25	36	-4	.6	- .1	.5	11.4	124	5.1	91	69	38	0	5	2	0
FL APALACHICOLA	59	38	66	29	49	-9	2.2	1.2	2.1	15.6	136	8.7	114	85	46	0	1	2	1
DAYTONA BEACH	65	41	79	30	53	-8	.4	- .4	.4	17.5	206	5.0	83	84	40	0	2	1	0
JACKSONVILLE	64	38	72	29	51	-7	2.9	2.0	2.9	13.2	132	6.8	94	86	39	0	2	1	1
KEY WEST	72	62	83	51	67	-5	.9	.5	.8	9.5	153	4.3	105	74	52	0	0	3	1
MIAMI	72	52	83	44	62	-7	.2	- .3	.1	5.3	82	.9	20	83	44	0	0	2	0
ORLANDO	67	44	82	33	56	-8	.4	- .4	.4	10.2	138	4.8	89	92	42	0	0	2	0
TALLAHASSEE	64	34	74	23	49	-7	3.5	2.2	3.4	17.6	114	10.1	98	91	36	0	4	2	1
TAMPA	68	46	80	36	57	-6	1.0	.1	.8	9.8	123	4.9	88	86	43	0	0	2	1
WEST PALM BEACH	70	49	82	36	59	-8	.4	- .2	.3	13.2	155	5.9	100	93	48	0	0	2	0
GA ATLANTA	53	33	65	25	43	-5	2.3	1.1	2.3	21.4	145	10.8	108	81	43	0	4	2	1
AUGUSTA	58	34	69	28	46	-5	2.1	1.0	2.1	13.9	115	8.3	95	76	32	0	4	2	1
MACON	60	35	69	27	48	-5	2.0	.7	1.9	15.5	109	8.7	90	78	38	0	4	2	1
SAVANNAH	61	38	71	30	50	-5	1.9	1.0	1.9	17.0	172	12.1	178	70	36	0	1	1	1
HI HILO	80	63	82	61	72	1	.1	- 3.3	.1	22.9	57	19.6	79	84	60	0	0	1	0
HONOLULU	82	65	83	62	74	0	.7	- .1	.7	2.6	24	1.3	19	89	51	0	0	1	1
KAHULUI	84	64	85	59	74	2	.5	- .2	.4	8.3	75	3.2	41	88	58	0	0	2	0
LIHUE	81	67	83	62	74	2	.4	- .6	.4	3.8	23	3.0	28	85	57	0	0	1	0
ID BOISE	46	27	55	22	37	-2	T	- .2	T	6.0	140	1.7	61	80	43	0	6	1	0
LEWISTON	54	36	59	30	45	4	T	- .2	T	2.1	57	1.0	45	81	43	0	1	1	0
POCATELLO	33	8	40	0	20	-12	.3	.1	.2	6.4	213	2.6	130	88	62	0	7	2	0
IL CHICAGO	34	21	39	17	27	-3	.1	- .3	.1	8.3	146	2.6	81	89	49	0	7	2	0
MOLINE	39	23	46	18	31	2	T	- .4	T	5.7	108	1.7	53	68	35	0	7	0	0
PEORIA	37	23	46	16	30	-1	.2	- .3	.2	7.3	130	2.9	88	82	51	0	7	2	0
QUINCY	39	27	43	21	33	0	.1	- .5	.1	6.3	129	2.2	71	78	55	0	6	2	0
ROCKFORD	36	20	40	12	28	0	T	- .4	T	5.4	106	2.0	69	75	35	0	7	0	0
SPRINGFIELD	34	23	42	15	29	-5	.4	- .2	.3	7.6	131	2.6	72	91	56	0	7	2	0
IN EVANSVILLE	38	25	43	13	31	-8	.7	- .2	.6	8.6	83	3.4	53	80	51	0	6	3	1
FORT WAYNE	32	16	39	9	24	-7	.5	0	.4	8.7	123	2.7	63	86	50	0	7	2	0
INDIANAPOLIS	34	18	43	5	26	-8	1.4	.7	.8	8.6	99	4.2	78	81	52	0	7	3	2
SOUTH BEND	31	19	38	9	25	-5	.3	- .3	.2	6.8	84	2.4	50	79	46	0	7	3	0
IA DES MOINES	42	27	50	19	34	5	T	- .4	T	4.6	124	1.9	79	74	43	0	7	0	0
SIOUX CITY	37	28	43	20	32	4	.2	- .1	.2	3.3	143	1.5	94	88	64	0	7	1	0
WATERLOO	38	22	43	18	30	5	T	- .3	T	3.3	94	1.4	67	82	45	0	7	0	0
KS CONCORDIA	45	25	59	17	35	0	.6	.3	.6	3.2	123	1.4	88	79	47	0	7	2	1
DODGE CITY	49	24	63	14	36	-2	.1	- .2	T	1.8	82	1.0	67	80	35	0	6	1	0
GOODLAND	41	22	54	10	31	-3	.1	- .1	.1	3.6	277	2.3	256	90	58	0	7	2	0
TOPEKA	45	27	58	20	36	0	.4	.1	.3	3.9	108	1.7	81	79	44	0	6	3	0
WICHITA	50	28	64	15	39	0	1.0	.6	.5	3.2	114	2.0	118	82	44	0	5	1	0
KY BOWLING GREEN	43	27	55	21	35	-6	1.1	- .1	.9	14.4	100	6.0	66	92	54	0	6	2	1
LEXINGTON	39	25	44	17	32	-7	.8	- .2	.5	10.4	87	5.0	66	90	56	0	7	2	1
LOUISVILLE	39	27	47	22	33	-7	.7	- .2	.5	8.0	71	2.5	35	76	47	0	6	2	1
LA ALEXANDRIA	59	42	72	32	51	-6	2.2	.9	2.2	20.4	125	14.6	135	81	49	0	1	2	1
BATON ROUGE	60	40	74	29	50	-7	2.3	1.2	2.3	18.1	116	9.2	91	83	46	0	2	1	1
LAKE CHARLES	64	44	75	32	54	-3	1.8	1.0	1.8	14.0	99	10.0	116	84	46	0	1	1	1
NEW ORLEANS	59	39	72	31	49	-8	1.3	.1	1.3	18.1	107	9.4	86	76	49	0	2	2	1

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending MARCH 3, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE NOV 27	PCT. NORMAL SINCE NOV 27	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	SHREVEPORT	59	39	71	26	49	-4	1.9	1.1	1.9	15.4	125	7.7	96	92	46	0	?	?	1
ME	CARIBOU	23	9	38	-3	16	-2	1.1	.6	.5	11.0	129	5.4	110	84	62	0	7	5	1
	PORTLAND	34	16	40	9	25	-2	1.2	.3	1.1	17.1	133	7.7	99	79	38	0	7	3	1
MD	BALTIMORE	42	28	50	23	35	-3	.7	- .2	.5	13.7	133	5.8	88	71	38	0	6	2	1
	SALISBURY	49	28	63	20	39	-1	.7	- .2	.6	11.1	97	6.5	89	85	41	0	6	2	1
MA	BOSTON	38	26	46	20	32	-2	1.6	.6	1.5	16.2	120	10.3	124	78	40	0	6	2	1
	CHATHAM	39	26	46	20	33	-1	1.5	.5	1.3	12.9	87	7.8	85	--	--	0	5	2	1
MI	ALPENA	29	14	32	9	21	0	T	- .3	T	3.7	66	1.7	50	87	40	0	7	1	0
	DETROIT	31	15	36	8	23	-7	.6	.1	.4	6.9	101	2.2	56	77	43	0	7	2	0
	FLINT	28	14	31	11	21	-6	.1	- .3	.1	3.4	59	1.1	32	80	50	0	7	2	0
	GRAND RAPIDS	32	17	36	12	24	-3	T	- .4	T	5.7	88	2.0	56	77	45	0	7	1	0
	HOUGHTON LAKE	27	12	33	8	20	-2	.1	- .3	.1	4.3	83	2.0	67	81	54	0	7	2	0
	LANSING	30	15	34	11	22	-5	.1	- .3	.1	3.5	57	1.3	36	85	49	0	7	2	0
	MARQUETTE	26	5	33	-2	16	-2	.3	- .3	.2	9.9	138	5.0	116	92	48	0	7	3	0
	MUSKEGON	30	16	34	9	23	-4	T	- .4	T	7.8	105	2.6	59	71	42	0	7	?	0
	SAULT STE. MARIE	23	6	32	0	14	-3	T	- .4	T	7.1	99	3.6	84	82	40	0	7	0	0
MN	ALEXANDRIA	32	12	35	7	22	5	0	- .2	0	3.1	124	1.6	100	85	50	0	7	0	0
	DULUTH	26	6	31	-3	16	-1	T	- .3	T	4.4	113	1.4	61	72	38	0	7	0	0
	INT'L FALLS	25	2	31	-7	14	1	T	- .2	T	2.0	71	1.0	59	79	42	0	7	0	0
	MINNEAPOLIS	32	17	34	13	25	2	T	- .3	T	5.1	189	2.4	141	70	36	0	7	0	0
	ROCHESTER	30	11	33	7	20	-1	.2	- .1	.2	4.3	154	2.2	129	83	52	0	7	1	0
MS	GREENWOOD	54	36	68	27	45	-5	1.1	- .2	.9	24.2	146	7.9	76	84	49	0	3	4	1
	JACKSON	56	34	69	24	45	-7	2.0	.8	1.7	15.3	94	7.6	74	94	55	0	2	3	1
	MERIDIAN	55	29	69	19	42	-9	1.8	.4	1.7	15.5	93	7.7	74	99	54	0	6	2	1
MO	CAPE GIRARDEAU	42	25	51	15	33	--	1.2	.2	1.0	9.7	90	5.2	81	95	64	0	6	3	1
	COLUMBIA	39	27	46	19	33	-4	1.7	1.1	1.3	7.3	114	3.7	90	87	61	0	6	2	1
	KANSAS CITY	43	27	54	22	35	-1	.5	.1	.5	4.4	116	2.1	91	87	55	0	6	2	0
	SAINT LOUIS	36	25	42	17	31	-7	1.6	.9	1.2	10.2	148	4.5	100	97	69	0	6	3	1
	SPRINGFIELD	45	27	61	21	36	-4	2.7	2.0	1.9	7.7	110	4.9	120	84	52	0	6	4	1
MT	BILLINGS	47	31	57	20	39	8	.3	.1	.3	2.7	113	1.7	106	72	40	0	4	2	0
	GLASGOW	39	22	51	14	31	10	T	0	T	1.1	79	.6	75	79	50	0	7	2	0
	GREAT FALLS	44	26	54	15	35	6	.2	0	.1	2.4	80	1.5	75	82	44	0	6	2	0
	HAVRE	43	21	53	17	32	8	T	- .1	T	.5	31	.7	78	95	43	0	7	0	0
	HELENA	44	23	51	15	34	5	T	- .1	T	1.3	68	.4	33	82	36	0	7	2	0
	KALISPELL	43	25	48	18	34	5	.1	- .2	T	3.1	67	1.5	52	88	50	0	7	2	0
	MILES CITY	43	23	54	16	33	7	T	- .1	T	.4	25	.1	11	84	49	0	7	0	0
	MISSOULA	45	28	51	22	36	6	T	- .1	T	3.0	86	1.2	52	95	45	0	5	2	0
NE	GRAND ISLAND	38	23	53	12	31	0	.6	.3	.6	4.7	196	2.4	171	82	57	0	7	2	1
	LINCOLN	43	25	55	16	34	3	.3	- .1	.3	3.8	146	1.8	100	89	58	0	7	1	0
	NORFOLK	36	22	47	9	29	1	.5	.2	.5	5.4	245	3.2	213	82	57	0	7	1	0
	NORTH PLATTE	40	19	60	10	30	-1	.2	0	.1	2.7	180	1.4	127	81	48	0	7	2	0
	OMAHA	39	25	48	17	32	2	.1	- .3	T	4.3	143	1.2	60	90	68	0	7	3	0
	SCOTTSBLUFF	46	21	58	8	33	1	.1	- .1	.1	2.2	147	.9	100	77	33	0	7	1	0
	VALENTINE	38	16	55	2	27	0	.1	0	.1	2.2	169	.8	100	81	54	0	7	1	0
NV	ELY	50	20	57	11	35	4	0	- .2	0	2.2	92	.8	50	86	29	0	7	0	0
	LAS VEGAS	67	40	74	33	53	1	0	- .1	0	.4	31	0	0	30	12	0	0	0	0
	RENO	58	25	65	18	41	2	0	- .2	0	2.0	54	.6	25	76	22	0	6	0	0
	WINNEMUCCA	51	26	58	19	39	2	T	- .1	T	4.8	166	1.0	53	76	30	0	7	0	0
NH	CONCORD	32	16	38	1	24	-2	.9	.3	.8	13.1	138	7.3	130	82	40	0	7	3	1
NJ	ATLANTIC CITY	41	23	56	17	32	-4	1.1	.2	1.1	11.3	98	6.0	82	84	46	0	6	2	1
NM	ALBUQUERQUE	59	26	67	19	42	0	0	- .1	0	.7	50	.3	33	53	13	0	7	0	0
	CLOVIS	56	28	68	20	42	-1	T	- .1	T	.7	47	.4	40	69	22	0	4	1	0
	ROSWELL	62	30	76	22	46	-3	T	- .1	T	.3	38	0	0	54	17	0	4	0	0
NY	ALBANY	31	18	38	12	25	-3	.7	.1	.6	9.6	113	3.7	73	83	46	0	7	2	1
	BINGHAMTON	27	16	35	12	21	-4	.8	.2	.7	11.7	133	5.0	93	91	60	0	7	5	1
	BUFFALO	26	18	30	13	22	-6	2.6	2.0	1.6	14.3	149	5.2	91	92	65	0	7	5	2
	NEW YORK	37	27	44	21	32	-4	.9	0	.9	12.9	118	5.8	87	78	49	0	6	2	1
	ROCHESTER	26	15	30	8	21	-7	2.4	1.8	1.6	10.6	133	5.1	104	91	66	0	7	6	1
	SYRACUSE	25	13	30	6	19	-9	1.4	.7	.6	10.6	115	4.7	84	96	69	0	7	5	1
NC	ASHEVILLE	44	24	53	16	34	-8	1.6	.5	1.5	18.6	159	8.8	113	93	45	0	7	3	1
	CHARLOTTE	49	29	59	21	39	-7	1.5	.4	1.4	17.6	149	9.9	122	77	35	0	5	2	1
	GREENSBORO	46	27	53	20	36	-7	1.1	.2	1.0	13.3	119	8.8	117	77	39	0	7	2	1
	HATTERAS	51	38	66	31	44	-3	1.2	.2	.7	12.7	88	5.8	62	67	42	0	1	2	1
	NEW BERN	55	34	66	29	45	-4	1.2	.2	1.2	13.3	105	8.5	98	83	41	0	3	1	1
	RALEIGH	49	29	55	23	39	-6	1.1	.2	1.0	17.3	157	10.5	140	78	39	0	5	2	1
	WILMINGTON	56	33	64	29	45	-6	1.1	.2	1.1	12.7	109	7.5	97	81	41	0	4	1	1
ND	BISMARCK	31	18	36	12	24	4	.1	0	.1	1.3	100	.7	88	86	58	0	7	?	0
	FARGO	30	16	31	5	23	7	.1	- .1	.1	3.2	178	1.9	173	83	53	0	7	1	0
	GRAND FORKS	29	15	34	7	22	7	.2	0	.2	1.9	106	1.1	92	90	58	0	7	1	0
	WILLISTON	38	18	53	6	28	9	T	- .1	T	1.6	94	.9	82	85	51	0	7	1	0
OH	AKRON-CANTON	28	14	35	7	21	-10	1.2	.6	.6	8.2	101	4.0	78	84	58	0	7	3	2
	CINCINNATI	33	19	44	11	26	-10	.9	.1	.5	7.0	71	3.2	49	88	56	0	7	3	0
	CLEVELAND	27	14	32	2	20	-11	1.2	.6	.6	8.5	100	4.8	91	91	59	0	7	4	2
	COLUMBUS	32	17	40	5	24	-10	.7	.1	.4	7.4	89	3.0	57	81	46	0	7	2	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending MARCH 3, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE NOV 27	PCT. NORMAL SINCE NOV 27	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	30	16	38	7	23	-11	1.1	.6	.6	7.5	94	3.9	76	85	51	0	7	3	1
TOLEDO	29	14	34	3	21	-8	.2	- .3	.2	7.2	101	2.2	52	81	52	0	7	2	0
YOUNGSTOWN	27	14	33	8	21	-9	1.1	.5	.6	8.4	98	3.6	67	84	59	0	7	3	1
OK OKLAHOMA CITY	54	31	66	21	42	-2	.5	.1	.4	2.3	56	1.6	62	83	42	0	4	2	0
TULSA	55	32	69	25	44	-1	1.8	1.2	1.3	4.3	78	3.3	100	80	40	0	2	3	1
OR ASTORIA	53	37	59	29	45	1	1.2	- .6	.4	24.8	74	15.3	75	95	58	0	1	5	0
BURNS	37	20	44	7	29	-6	.1	0	.1	4.7	261	1.0	125	81	61	0	7	1	0
MEDFORD	56	36	58	28	46	2	.1	- .4	.1	9.7	100	2.7	47	97	52	0	2	1	0
PENDLETON	53	35	58	30	44	1	.1	- .2	.1	6.0	118	2.4	77	84	44	0	2	1	0
PORTLAND	56	41	58	33	49	4	.4	- .5	.2	11.3	63	6.0	56	88	49	0	0	3	0
SALEM	55	36	59	31	46	2	.4	- .6	.2	14.8	73	7.7	63	98	60	0	2	4	0
PA ALLENTOWN	36	22	42	17	29	-4	.4	- .4	.4	13.7	125	5.2	75	74	43	0	7	2	0
ERIE	27	18	31	10	23	-5	.8	.2	.4	9.0	103	4.0	78	81	58	0	7	4	0
HARRISBURG	35	24	39	20	30	-6	1.0	.3	.8	13.0	96	5.5	89	70	43	0	7	3	1
PHILADELPHIA	40	25	51	19	32	-5	.6	- .2	.6	12.5	120	4.9	75	76	44	0	6	2	1
PITTSBURGH	30	15	36	11	22	-10	1.1	.4	.7	8.8	104	3.5	61	81	48	0	7	4	1
SCRANTON	32	21	39	15	27	-4	.2	- .4	.1	10.9	140	4.2	88	77	55	0	7	3	0
RI PROVIDENCE	39	25	45	19	32	-1	2.2	1.3	2.2	17.8	131	9.3	109	73	35	0	6	2	1
SC CHARLESTON	59	37	68	29	48	-5	1.5	.5	1.5	13.0	123	8.6	119	86	38	0	1	1	1
COLUMBIA	54	31	67	26	43	-7	1.7	.5	1.6	15.9	121	9.0	98	86	33	0	6	2	1
FLORENCE	53	32	63	27	43	-8	1.4	.4	1.4	13.7	126	7.3	99	87	42	0	4	1	1
GREENVILLE	49	30	62	21	40	-7	1.9	.6	1.8	19.3	140	10.2	107	73	33	0	5	2	1
SD ABERDEEN	34	25	37	23	30	9	.2	.1	.2	2.1	124	1.4	117	88	66	0	7	1	0
HURON	36	25	45	20	31	8	.6	.4	.6	2.6	144	1.6	123	92	62	0	7	2	1
RAPID CITY	44	20	56	7	32	4	.2	0	.1	.8	47	.3	27	80	41	0	7	3	0
SIOUX FALLS	34	22	40	17	28	3	.5	.2	.5	2.9	132	1.8	129	92	66	0	7	2	0
TN CHATTANOOGA	51	29	63	21	40	-5	1.8	.5	1.7	19.3	116	7.7	71	87	42	0	6	2	1
KNOXVILLE	52	29	66	19	41	-4	1.4	.2	1.0	13.6	91	6.8	71	88	46	0	6	2	1
MEMPHIS	53	34	66	27	43	-4	1.0	- .1	.7	15.7	104	6.4	66	85	43	0	4	2	1
NASHVILLE	50	28	60	18	39	-5	.9	- .3	.7	13.8	95	4.2	45	83	46	0	5	3	1
TX ABILENE	62	34	78	22	48	-4	.2	0	.2	2.2	73	1.5	71	72	29	0	2	1	0
AMARILLO	53	26	68	15	40	-3	.4	.2	.4	1.7	100	1.0	100	78	28	0	6	1	0
AUSTIN	66	44	79	31	55	-2	.5	0	.5	3.6	53	2.7	61	69	31	0	1	1	0
BEAUMONT	63	45	73	32	54	-4	.4	- .4	.4	18.6	140	10.7	130	90	49	0	1	1	0
BROWNSVILLE	72	51	87	37	61	-4	.1	- .2	.1	5.8	135	5.3	183	83	39	0	0	1	0
CORPUS CHRISTI	69	47	82	34	58	-4	0	- .3	0	7.0	137	6.4	183	83	36	0	0	0	0
DEL RIO	68	44	81	34	56	-4	0	- .2	0	1.6	84	1.6	114	65	23	0	0	0	0
EL PASO	66	31	75	23	48	-3	0	- .1	0	.4	33	.3	38	48	16	0	4	0	0
FORT WORTH	60	39	75	26	49	-3	.7	.2	.7	5.2	95	4.1	111	84	40	0	3	1	1
GALVESTON	61	47	70	38	54	-4	.1	- .4	.1	7.5	77	4.2	76	83	54	0	0	1	0
HOUSTON	63	42	77	28	52	-5	.5	- .2	.5	13.0	117	8.2	119	81	36	0	2	1	0
LUBBOCK	58	29	75	20	43	-2	.2	0	.2	.5	38	.2	22	77	23	0	5	1	0
MIDLAND	63	32	79	22	48	-3	.2	0	.2	.7	44	.6	55	70	20	0	4	1	0
SAN ANGELO	65	34	80	19	50	-3	.4	.2	.4	3.1	141	3.0	200	81	26	0	3	1	0
SAN ANTONIO	67	42	82	29	55	-3	T	- .3	T	2.9	56	2.3	66	74	28	0	1	1	0
VICTORIA	67	43	80	31	55	-4	.2	- .2	.2	5.4	77	4.5	98	86	38	0	1	1	0
WACO	62	38	76	23	50	-4	.5	0	.5	2.7	42	1.8	44	87	39	0	2	1	0
WICHITA FALLS	59	33	75	22	46	-3	.1	- .3	.1	1.9	50	1.0	43	82	38	0	3	1	0
UT BLANDING	51	23	58	16	37	1	0	- .2	0	1.8	45	.7	27	64	27	0	7	0	0
CEDAR CITY	51	25	61	18	38	1	0	- .2	0	2.3	96	1.5	83	78	29	0	7	0	0
SALT LAKE CITY	36	19	40	8	28	-9	T	- .3	T	5.7	130	1.4	50	97	66	0	7	2	0
VT BURLINGTON	23	11	31	2	17	-5	1.2	.7	.9	9.5	140	3.8	97	83	46	0	7	4	1
VA NORFOLK	49	32	63	28	41	-3	.7	- .2	.5	13.7	122	7.6	100	67	38	0	5	2	0
RICHMOND	46	28	51	21	37	-5	.5	- .3	.4	12.7	118	8.1	117	76	39	0	7	2	0
ROANOKE	42	26	52	16	34	-7	.6	- .3	.3	12.4	125	6.3	95	75	40	0	7	2	0
WA COLVILLE	44	28	49	20	36	2	.2	- .1	.2	5.4	82	3.0	79	90	73	0	6	1	0
QUILLAYUTE	51	38	55	29	45	3	3.3	.4	1.0	41.0	87	33.0	114	98	59	0	1	6	4
SEATTLE-TACOMA	52	39	58	35	46	2	.6	- .3	.3	12.6	71	7.5	71	91	52	0	0	5	0
SPOKANE	46	30	52	21	38	3	.2	- .1	.2	5.0	71	2.5	60	90	53	0	5	2	0
YAKIMA	52	29	57	25	40	1	T	- .1	T	3.2	84	1.0	43	81	40	0	6	2	0
WV BECKLEY	34	19	41	14	26	-9	.2	- .7	.1	8.0	72	5.6	76	97	59	0	7	4	0
CHARLESTON	40	22	47	16	31	-8	1.3	.4	1.0	7.7	71	4.2	58	86	51	0	6	4	1
HUNTINGTON	40	25	49	22	33	-7	1.2	.4	.8	7.4	75	3.8	59	73	45	0	6	4	1
PARKERSBURG	37	22	46	15	30	-8	.8	0	.6	7.0	65	2.7	36	97	62	0	7	2	1
WI GREEN BAY	31	13	36	8	22	0	0	- .3	0	4.2	105	2.1	91	77	36	0	7	0	0
LA CROSSE	37	14	40	8	26	2	.1	- .2	.1	2.2	69	1.0	50	80	29	0	7	1	0
MADISON	32	13	36	6	23	-2	T	- .3	T	4.8	114	1.6	70	83	39	0	7	0	0
MILWAUKEE	35	22	40	17	28	1	T	- .4	T	6.2	111	2.1	64	70	36	0	7	1	0
WAUSAU	32	11	36	5	21	1	0	- .3	0	3.5	103	1.9	100	75	37	0	7	0	0
WY CASPER	40	22	45	11	31	2	.2	.1	.1	2.5	147	1.8	150	85	50	0	7	3	0
CHEYENNE	36	17	46	-2	27	-4	.1	- .1	.1	2.8	156	1.4	117	86	52	0	7	3	0
LANDER	30	13	40	6	22	-7	.3	.1	.2	3.0	167	2.3	209	84	58	0	7	2	0
SHERIDAN	42	22	53	8	32	3	.2	0	.2	1.3	54	1.1	69	87	51	0	7	2	0
PR SAN JUAN	87	71	91	68	79	2	.1	- .4	T	8.8	84	5.2	96	87	47	2	0	3	0

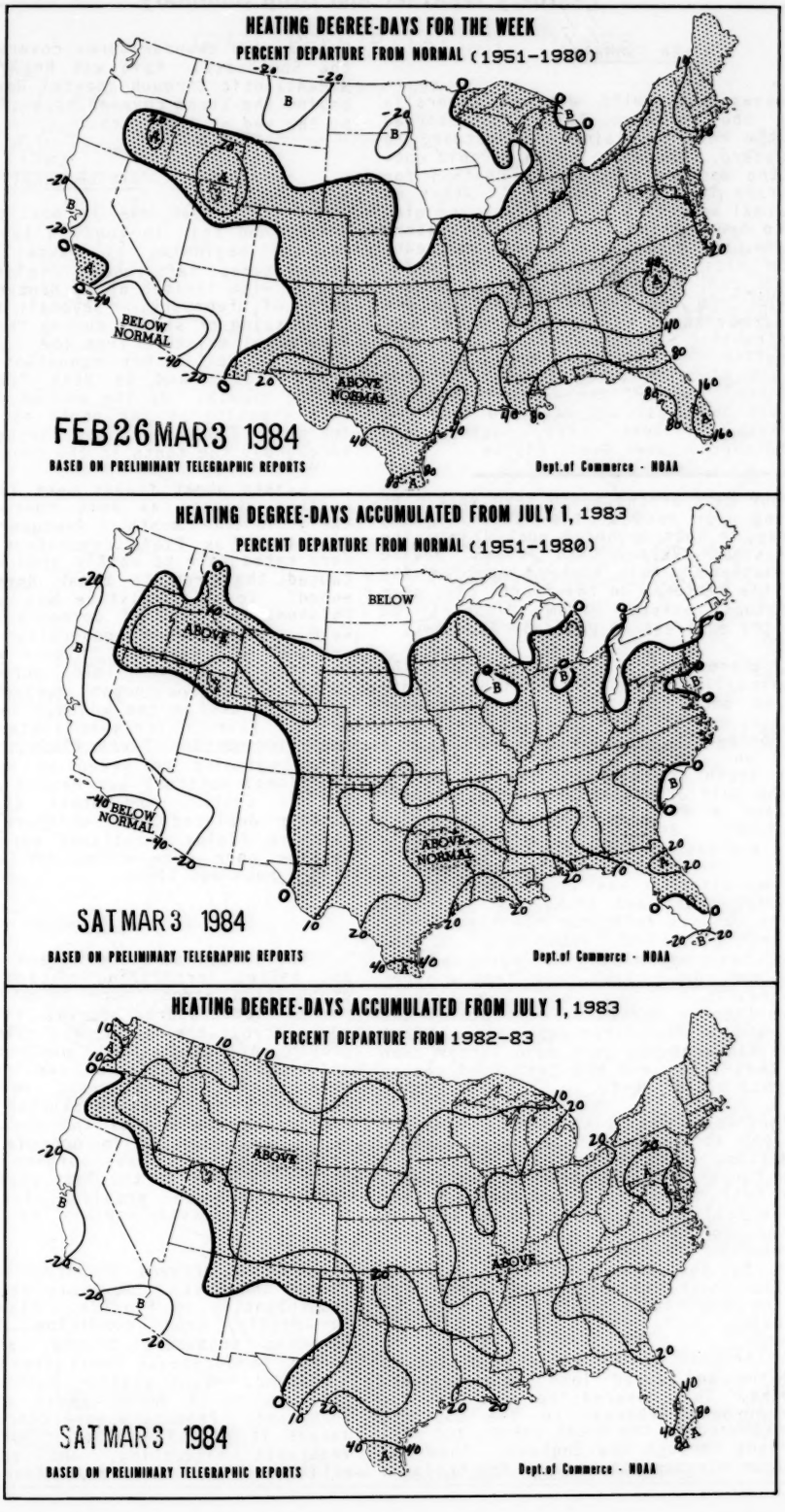
BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

HEATING DEGREE DAY DATA WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 3- 3-1984
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NORM PRCT	CUM DEV FROM L YR PRCT
AL BIRMINGHAM	BHM	156	44	68	2654	244	428	10	19
AL MOBILE	MOB	122	59	51	1828	331	341	22	23
AL MONTGOMERY	MGM	138	46	67	2070	108	422	6	26
AK ANCHORAGE	ANC	263	-51	-16	7472	-457	-302	-6	-4
AK BARROW	BRW	673	80	117	14198	382	33	3	0
AK FAIRBANKS	FAI	452	4	43	10702	-311	472	-3	5
AK JUNEAU	JNU	187	-58	-28	6086	-391	247	-6	4
AK KODIAK	ADQ	222	-22	27	5358	-672	-102	-11	-2
AK NOME	OME	460	30	127	9672	-224	698	-2	8
AZ FLAGSTAFF	FLG	200	-30	-8	4645	-430	-512	-8	-10
AZ PHOENIX	PHX	13	-43	-18	753	-482	-149	-39	-17
AZ TUCSON	TUS	56	-12	-2	1305	-126	-106	-9	-8
AZ WINSLOW	INW	168	4	18	3488	-318	231	-8	7
AZ YUMA	YUM	10	-25	-1	475	-387	-173	-45	-27
AR FORT SMITH	FSM	154	20	73	3251	340	532	12	20
AR LITTLE ROCK	LM1	150	28	63	3011	349	466	13	18
CA BAKERSFIELD	BFL	75	6	26	1616	-118	-315	-7	-16
CA EUREKA	EKA	100	-12	29	2270	-827	-79	-27	-3
CA FRESNO	FAT	71	-17	23	1664	-451	-360	-21	-18
CA LOS ANGELES	LAX	30	-26	-21	765	-292	-48	-28	-6
CA RED BLUFF	RBL	85	-6	11	1963	-115	-30	-6	-2
CA SAN DIEGO	SAN	20	-29	-6	448	-432	-130	-49	-22
CA SAN FRANCISCO	SFO	64	-26	1	1486	-678	-573	-31	-28
CA STOCKTON	SCK	90	-1	30	1913	-197	-230	-9	-11
CO DENVER	DEN	231	23	98	4884	444	467	10	11
CO GRAND JUNCTION	GJT	182	-10	60	4345	-161	533	-4	14
CO PUEBLO	PUB	205	13	85	4495	285	448	7	11
CT BRIDGEPORT	BDR	230	10	54	4046	-16	251	0	7
CT HARTFORD	BDL	255	18	65	4667	-63	349	-1	8
DE WILMINGTON	ILG	233	35	88	4050	186	650	5	19
DC WASHINGTON	DCA	200	30	87	3256	-42	436	-1	15
FL APALACHICOLA	AQQ	114	58	55	1446	206	379	17	35
FL DAITONA BEACH	DAB	88	47	59	972	179	223	23	30
FL FORT MEYER	FMY	44	25	28	367	-45	75	-11	26
FL JACKSONVILLE	JAX	97	40	49	1372	122	166	10	14
FL KEY WEST	EYW	11	5	11	78	-34	36	-30	86
FL MIAMI	MIA	27	20	27	185	-3	86	-2	87
FL ORLANDO	MCO	69	39	45	691	85	173	14	33
FL TALLAHASSEE	TLH	107	40	57	1573	124	363	9	30
FL TAMPA	TPA	60	26	33	686	16	180	2	36
FL WEST PALM BEACH	PBI	48	34	41	278	26	99	10	55
GA ATLANTA	ATL	154	36	54	2684	171	352	7	15
GA AUGUSTA	AGS	133	30	37	2224	41	197	2	10
GA MACON	MCN	119	26	45	2010	38	310	2	18
GA SAVANNAH	SAV	107	27	37	1678	-2	197	0	13
HI HILO-HAWAII	ITO	0	0	0	0	0	0	**	**
HI HONOLULU-OAHU	HNL	0	0	0	0	0	0	**	**
HI KAHULUI-MAUI	OGG	0	0	0	0	0	0	**	**
HI LIHUE-KAUAI	LIH	0	0	0	0	0	0	**	**
ID BOISE	BOI	196	13	76	4901	554	776	13	19
ID LEWISTON	LWS	141	-27	30	4065	-32	386	-1	10
ID POCATELLO	PIH	310	81	155	5778	528	741	10	15
IL CHICAGO	ORD	262	19	119	5276	331	835	7	19
IL MOLINE	MLI	233	-14	113	5099	6	828	0	19
IL PEORIA	PIA	241	5	123	4858	-34	837	-1	21
IL ROCKFORD	RFD	259	-2	120	5522	146	909	3	20
IL SPRINGFIELD	SPI	253	34	141	4690	216	825	5	21
IN EVANSVILLE	EVV	234	52	126	3970	153	917	4	30
IN FORT WAYNE	FWA	285	45	149	4796	-65	854	-1	22
IN INDIANAPOLIS	IND	270	54	140	4554	114	792	3	21
IN SOUTH BEND	SBN	277	34	149	4944	84	919	2	23
IA DES MOINES	DSM	213	-39	125	5242	81	888	2	20
IA DUBUQUE	DBQ	255	-20	112	5727	27	807	0	16
IA SIOUX CITY	SUX	227	-33	112	5523	41	503	1	10
KS CONCORDIA	CNK	209	-2	121	4724	288	461	6	11
KS DODGE CITY	DDC	198	9	116	4203	216	552	5	15
KS GOODLAND	GLD	234	17	127	4978	364	757	8	18
KS TOPEKA	TOP	199	0	118	4400	131	594	3	16
KS WICHITA	ICT	182	0	84	4267	403	572	10	15
KY LEXINGTON	LEX	230	45	115	3896	77	620	2	19
KY LOUISVILLE	SDF	221	44	106	3800	166	628	5	20
LA BATON ROUGE	BTR	106	40	43	1815	326	401	22	28
LA LAKE CHARLES	LCH	77	15	21	1506	106	185	8	14
LA NEW ORLEANS	MSY	108	49	52	1628	302	449	23	38
LA SHREVEPORT	SHV	112	20	56	2435	475	463	24	23
ME CARIBOU	CAR	339	8	54	6766	-334	261	-5	4
ME PORTLAND	PWM	277	9	61	5157	-324	182	-6	4
MD BALTIMORE	BWI	209	21	66	3751	61	367	2	11
MA BOSTON	BOS	231	12	59	4054	-106	281	-3	7
MI ALPENA	APN	304	-4	75	6013	-90	563	-1	10
MI DETROIT	DTW	294	44	126	5137	162	884	3	21
MI FLINT	FNT	306	37	142	5361	83	1025	2	24
MI GRAND RAPIDS	GRR	282	18	123	5261	55	935	1	22
MI HOUGHTON LAKE	HTL	317	11	117	5964	-155	682	-3	13
MI LANSING	LAN	296	30	134	5522	263	960	5	21
MI MARQUETTE	MQT	344	13	103	6813	-122	417	-2	7
MI MUSKEGON	MKG	293	29	118	5222	100	735	2	16
MI SAULT ST MARIE	SSM	353	23	102	6666	-54	292	-1	5
MN DULUTH	DLH	340	2	95	7014	-337	270	-5	4
MN INT'L FALLS	INL	357	-7	106	7742	-290	662	-4	9
MN MINNEAPOLIS	MSP	280	-18	118	6327	113	946	2	18
MN ROCHESTER	RST	311	8	124	6517	162	976	3	18
MN SAINT CLOUD	STC	305	-18	108	6789	-95	678	-1	11
MS JACKSON	JAN	137	41	62	2390	336	396	16	20
MS MERIDIAN	MEI	156	58	80	2433	314	706	15	41
MO COLUMBIA	COU	224	24	126	4355	207	772	5	22
MO KANSAS CITY	MCI	209	7	123	4601	372	709	9	18
MO SAINT LOUIS	STL	238	47	139	4050	81	679	2	20
MO SPRINGFIELD	SGF	202	26	110	3858	139	641	4	20
MT BILLINGS	BIL	181	-57	36	5069	-273	628	-5	14
MT GLASGOW	GGW	238	-74	49	6301	-498	270	-7	4
MT GREAT FALLS	GTF	206	-46	16	5615	-78	556	-1	11
MT HAVRE	HVR	231	-58	39	6281	-274	582	-4	10
MT HELENA	HLN	216	-36	34	5909	-114	549	-2	10
MT KALISPELL	FCA	216	-36	25	6169	-1	434	0	8
MT MILES CITY	MLS	221	-49	69	5751	-292	436	-5	8
MT MISSOULA	MSO	198	-40	32	5963	157	606	3	11
NE GRAND ISLAND	GRI	238	0	138	5210	120	455	2	10
NE LINCOLN	LNK	215	-24	122	5166	116	659	2	15
NE NORFOLK	OFK	250	-10	129	5503	7	625	0	13
NE NORTH PLATTE	LBF	247	5	124	5536	244	758	5	16
NE OMAHA	ONA	230	-4	139	5347	416	746	8	16
NE VALENTINE	VTN	266	2	134	5738	147	830	3	17
NV ELY	ELY	207	-31	1	5200	-273	-226	-5	-4
NV LAS VEGAS	LAS	79	-8	14	1806	-308	-296	-15	-14
NV RENO	RNO	164	-18	-5	3827	-540	-623	-12	-14
NV WINNEMUCCA	WMC	183	-13	21	4637	-18	22	0	0
NH CONCORD	CON	236	14	83	5458	-148	457	-3	9
NJ ATLANTIC CITY	ACY	228	27	74	3881	37	375	1	11
NM ALBUQUERQUE	ABQ	156	-2	33	3378	-159	-240	-4	-7
NM ROSWELL	ROW	130	17	57	2774	117	-151	4	-5
NY ALBANY	ALB	281	18	78	5216	-43	452	-1	9
NY BINGHAMTON	BGM	304	29	105	5093	-350	388	-6	8
NY BUFFALO	BUF	303	42	111	5023	-4	648	0	15
NY NEW YORK	LGA	229	27	66	3715	-27	348	-1	10
NY ROCHESTER	ROC	310	49	114	4926	-72	591	-1	14
NY SYRACUSE	SYR	323	61	113	5270	202	526	4	11
NC ASHEVILLE	AVL	215	55	69	3485	99	329	3	10
NC CAPE HATTERAS	HAT	142	20	34	2134	44	323	2	18
NC CHARLOTTE	CLT	160	46	60	2881	128	249	5	9
NC GREENSBORO	GSO	199	46	66	3283	144	229	5	7
NC RALEIGH DURHAM	RDU	182	39	63	2984	103	284	4	11
NC WILMINGTON	ILM	140	34	33	2131	58	76	3	4
ND BISMARCK	BIS	285	-32	80	6674	-270	689	-4	12
ND FARGO	FAR	292	-48	85	6958	-226	639	-3	10
ND WILLISTON	ISN	258	-61	58	6638	-414	334	-6	5
OH AKRON-CANTON	CAK	305	67	152	4608	-127	661	-3	17
OH CLEVELAND	CLE	313	75	150	4835	175	965	4	25
OH COLUMBUS	CMH	285	69	134	4525	99	715	2	19
OH CINCINNATI	CVG	270	68	134	4412	275	1000	7	29
OH DAYTON	DAY	292	73	153	4766	334	895	8	23
OH TOLEDO	TOL	304	57	132	5213	214	867	4	20
OH YOUNGSTOWN	YNG	310	63	159	4887	-49	940	-1	24
OK OKLAHOMA CITY	OKC	158	14	86	3349	265	570	9	21
OK TULSA	TUL	149	5	71	3180	76	503	2	19
OR ASTORIA	AST	139	-8	36	3445	-77	548	-2	19
OR BURNS	4BW	252	42	70	5983	960	721	19	14
OR MEDFORD	MFR	134	-13	24	3284	-222	4	-6	0
OR PENDLETON	PDT	148	-13	24	4157	192	429	5	12
OR PORTLAND	PDX	114	-26	2	3046	-274	176	-8	6
OR SALEM	SLE	135	-12	18	3110	-371	-64	-11	-2
PA ALLENTOWN	ABE	250	26	75	4444	-26	491	-1	12
PA ERIE	ERI	295	36	99	4601	-330	575	-7	14
PA HARRISBURG	CXY	246	36	90	4414	261	800	6	22
PA PHILADELPHIA	PHL	230	32	67	3938	89	499	2	15
PA PITTSBURGH	PIT	296	70	134	4639	61	707	1	18
PA SCRANTON	AVP	268	26	81	4648	-175	322	-4	7
RI PROVIDENCE	PVD	231	2	56	4090	-308	243	-7	6
SC CHARLESTON	CHS	114	24	28	1748	-88	139	-5	9
SC COLUMBIA	CAE	155	48	46	2432	200	161	9	7
SC GREENVILLE	GSP	175	46	63	2948	274	389	10	15
SD ABERDEEN	ABR	244	-64	72	6345	-278	802	-4	14
SD HURON	HON	238	-56	89	5976	-296	838	-5	16
SD RAPID CITY	RAP	227	-27	93	5369	-65	642	-1	14
SD SIOUX FALLS	FSD	261	-26	115	6101	-18	577	0	10
TN CHATTANOOGA	CHA	174	36	74	3163	214	516	7	19
TN KNOXVILLE	TYS	169	29	52	3241	232	434	8	15
TN MEMPHIS	MEM	149	21	67	2846	151	531	6	23
TN NASHVILLE	BNA	181	34	85	3266	179	639	6	24
TX ABILENE	ABI	119	24	74	2484	245	267	11	12
TX AMARILLO	AMA	175	17	91	3741	364	198	11	6
TX AUSTIN	AUS	76	8	39	1754	200	153	13	10
TX BROWNSVILLE	BRO	40	18	22	826	258	325	45	65
TX CORPUS CHRISTI	CRP	55	20	29	1205	319	314	36	35
TX DEL RIO	DRT	66	16	43	1638	260	289	19	21
TX EL PASO	ELP	117	22	46	2134	-172	-149	-7	-7
TX FORT WORTH	DFW	108	16	57	2477	489	455	25	23
TX GALVESTON	GLS	74	20	31	1311	206	275	19	27
TX HOUSTON	IAH	90	29	42	1671	295	310	21	23
TX LUBBOCK	LBB	149	15	87	2962	54	-166	2	-5
TX MIDLAND ODESSA	MAF	120	21	72	2483	207	125	9	5
TX SAN ANGELO	SJT	105	20	53	2336	327	242	16	12
TX SAN ANTONIO	SAT	75	16	37	1751	319	214	22	14
TX VICTORIA	VCT	68	16	38	1389	246	279	22	25
TX WACO	ACT	102	17	51	2209	364	374	20	20
TX WICHITA FALLS	SPS	131	17	77	2871	318	451	12	19
UT SALT LAKE CITY	SLC	259	64	129	4466	54	270	1	6
VT BURLINGTON	BTV	333	35	90	5555	-397	511	-7	10
VA LYNCHBURG	LYH	211	41	82	3487	34	421	1	14
VA NORFOLK	ORF	168	21	50	2764	20	262	1	10
VA RICHMOND	RIC	196	37	78	3377	171	556	5	20
VA ROANOKE	ROA	215	49	90	3486	43	197	1	6
WA QUILLAYUTE	UIL	141	-20	1	3959	-66	170	-2	4
WA SEATTLE-TACOMA	SEA	135	-14	0	3392	-199	199	-6	6
WA SPOKANE	GEG	185	-25	27	5002	-96	290	-2	6
WA WALLA WALLA	ALW	132	-19	14	3848	163	526	4	16
WA YAKIMA	YKM	170	-10	42	4517	-69	274	-2	6
WV BECKLEY	BKW	270	66	115	4450	151	586	4	15
WV CHARLESTON	CRW	233	54	104	3698	-35	460	-1	14
WV HUNTINGTON	HTS	226	49	104	3826	103	621	3	19
WV PARKERSBURG	PKB	245	54	107	3853	-49	587	-1	18
WI GREEN BAY	GRB	300	0	98	6060	-70	632	-1	12
WI LACROSSE	LSE	272	-13	100	6000	139	684	2	13
WI MADISON	MSN	295	15	125	5906	58	628	1	12
WI MILWAUKEE	MKE	256	-11	91	5314	-119	688	-2	15
WY CASPER	CPR	239	-13	91	5825	270	660	5	13
WY CHEYENNE	CYS	268	23	101	5622	423	652	8	13
WY LANDER	LND	301	47	130	6457	619	684	11	12
WY SHERIDAN	SHR	229	-23	98	5633	-132	687	-2	14

FAX CHART 136 OCT 73



February Weather and Crop Summary

WEATHER SUMMARY

HIGHLIGHTS: Unseasonably mild weather generally continued over the northern Plains and spread southward into the central Plains and eastward to the Atlantic seaboard. However, two major cold outbreaks covered the eastern half of the Nation for several days during the first and fourth weeks of the month. Abnormal wetness stretched from the mid-Appalachians into New England, and over the western Great Lakes Region, south-central Florida, northeast Texas, and from Missouri to Oregon. The major winter storm at the end of the month dumped considerable snow from the central Plains to the Appalachians, and northward to the Great Lakes and New England, causing severe chill, several fatalities, traffic accidents, and hampering transportation and election voter turnout in Iowa and New Hampshire. Drier than usual weather continued over the Southwest and extended into the central High Plains of West Texas, southwestern Nebraska, and the northwestern Great Plains.

The first four days of the month were marked by a gradual warming over most of the Nation. Then, on the fourth day, a cold outbreak pushed into the northern Mississippi Valley and began moving southward and eastward. Rain covered most of the eastern part of the Nation. On the fourth day, near blizzard conditions existed from Missouri to Minnesota, with the outbreak of cold air and snow.

FIRST WEEK...A severe arctic outbreak through the upper Mississippi Valley brought high winds, frigid temperatures, and snow to the middle and upper Mississippi Valley, and eastward to the mid-Atlantic States and the Northeast. The cold air spread over all of the East and dropped temperatures to below freezing as far south as central Florida. Later, warm air from the Gulf of Mexico triggered showers, thunderstorms, and a few tornadoes from eastern Texas into Kentucky. Beneficial showers covered most of Oklahoma and eastern Kansas.

SECOND WEEK...Precipitation was prolific from the Plains to the east coast and along the northwest coast, but lesser amounts fell over the Plateau and the Rockies, and little or none fell in the Southwest. Some heavy snow fell in parts of the central Plateau and the Rockies, and from eastern Colorado to Minnesota. Showers and thunderstorms dominated the weather in the Gulf Coast States and the Southeast, and a few tornadoes caused local damage. Average temperatures were much warmer than normal through the Plains and the East, and cooler than normal in most of the West.

THIRD WEEK...Significant precipitation was confined to the areas along the gulf coast and the eastern third of the Nation. Some moderate to heavy rain fell from South Carolina to the New England coast, and heavy snow fell in the central Appalachians. Little or no rain fell in the Southwest and most of the central and northern Plains. Above-normal average temperatures covered the area from the northern Plains to the Southeast. It was much colder than normal over the central Plateau, and some early morning temperatures were in the teens in the Texas Panhandle.

FOURTH WEEK...An intense winter storm developed in the central Plains and moved into Tennessee and then northeastward. Snow covered the area from the central Plains through Arkansas to the southern Appalachians, northward to the Great Lakes, and west of the Appalachians through New England. Snow was heavy at times from Missouri to western New England. Showers and thunderstorms covered much of Texas and the Southeast. Rain was heavy at times from the mid-Atlantic through coastal New England. Cold air behind the storm covered most of the Nation by the end of the month.

WINTER WHEAT

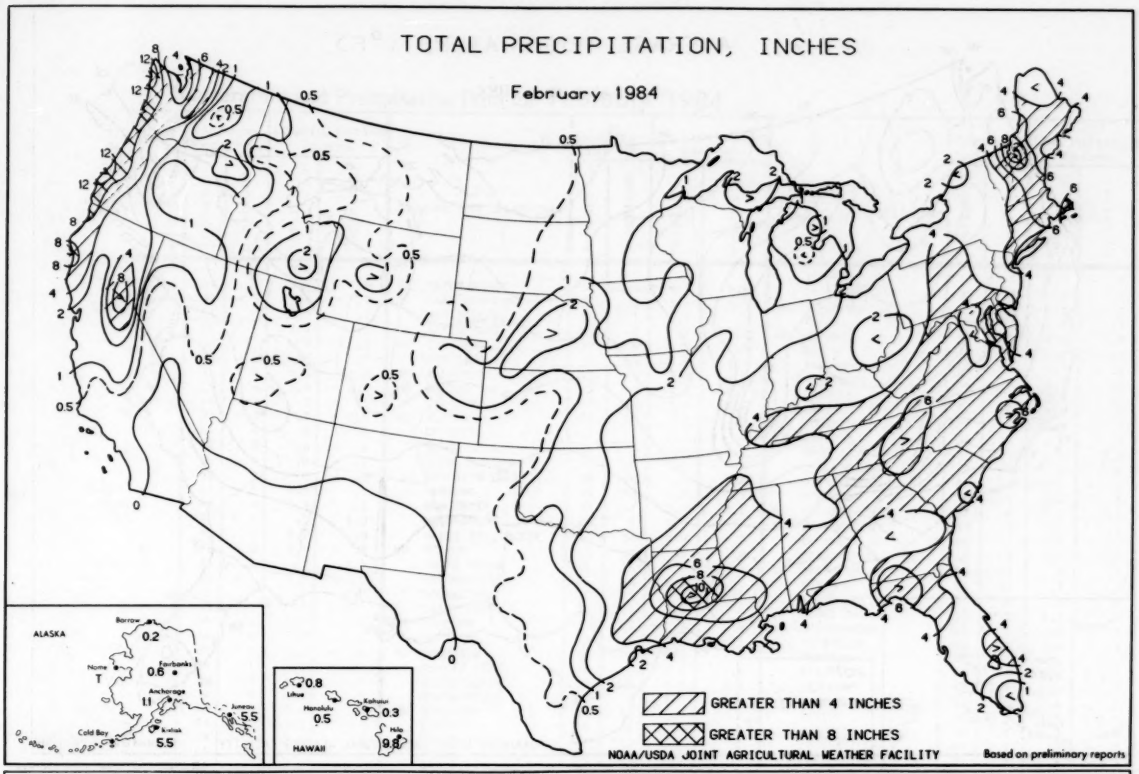
Winter wheat was in mostly fair condition in Texas, and fair to good in the rest of the Nation at the beginning of March. Unseasonably mild temperatures left wheat fields across the Great Plains with limited or no protective snow cover for much of February. Several snow storms halted topdressing of stands during the month but provided beneficial moisture from the central Plains through the Corn Belt. Dry conditions persisted on the Texas Plains and in West Texas, limiting early spring growth. By the end of February, wheatlands were greening as far north as Kansas and southern Indiana. Topdressing was limited by wet conditions throughout the month in the Southeast.

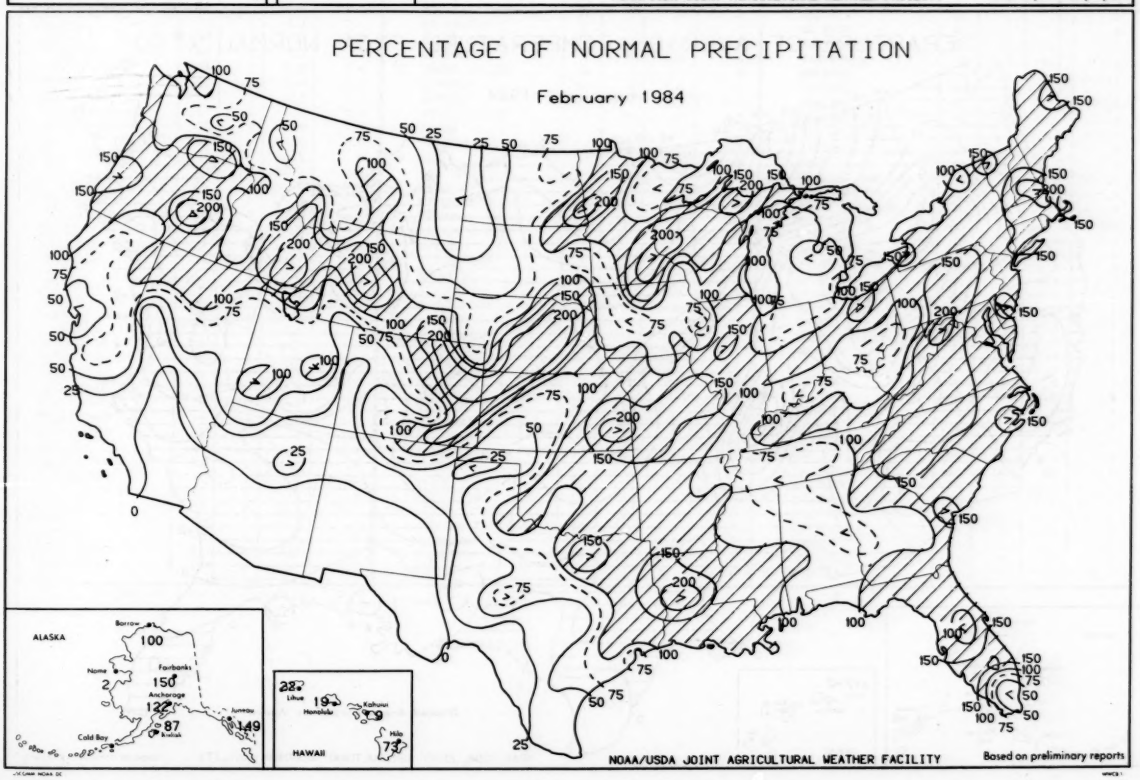
Kansas wheat fields were left unprotected from weather changes as snow cover was mostly melted early in the month. Producers actively applied fertilizer as field conditions permitted. Stands were rated fair to mostly good as mild temperatures caused the crop to break dormancy as the month ended. Topsoil moisture was adequate. Wheat in Oklahoma came out of dormancy early in the month. Warm weather and generally adequate moisture promoted good growth. Stands were in mostly good condition but some fields were plagued by weeds. Cattle producers began moving herds onto wheat pastures late in the month. Texas wheat was rated mostly fair. Irrigated stands were in good condition on the Texas Plains, and dryland fields were beginning to green up as the month ended. Additional moisture was needed on the Texas Plains and in Central and South Texas. Drying winds further depleted soil moisture late in February. Northern Plains wheatlands were in good condition despite poor snow cover for much of the month. Wind damage was light.

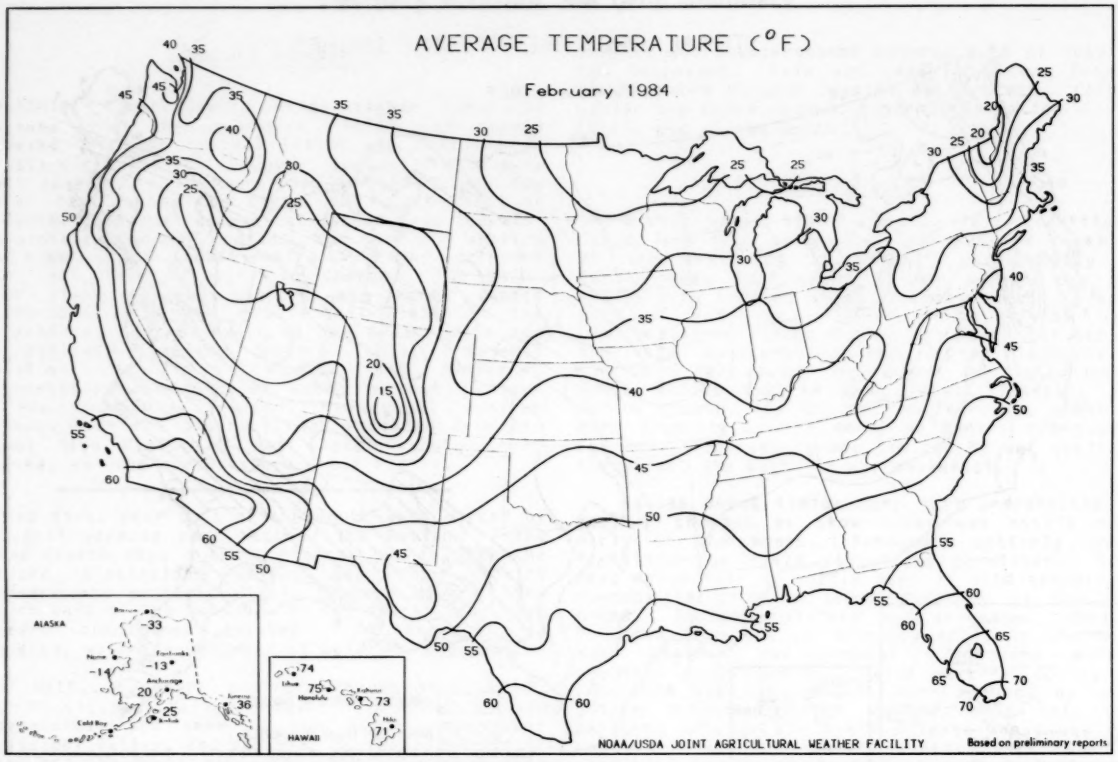
FIELDWORK

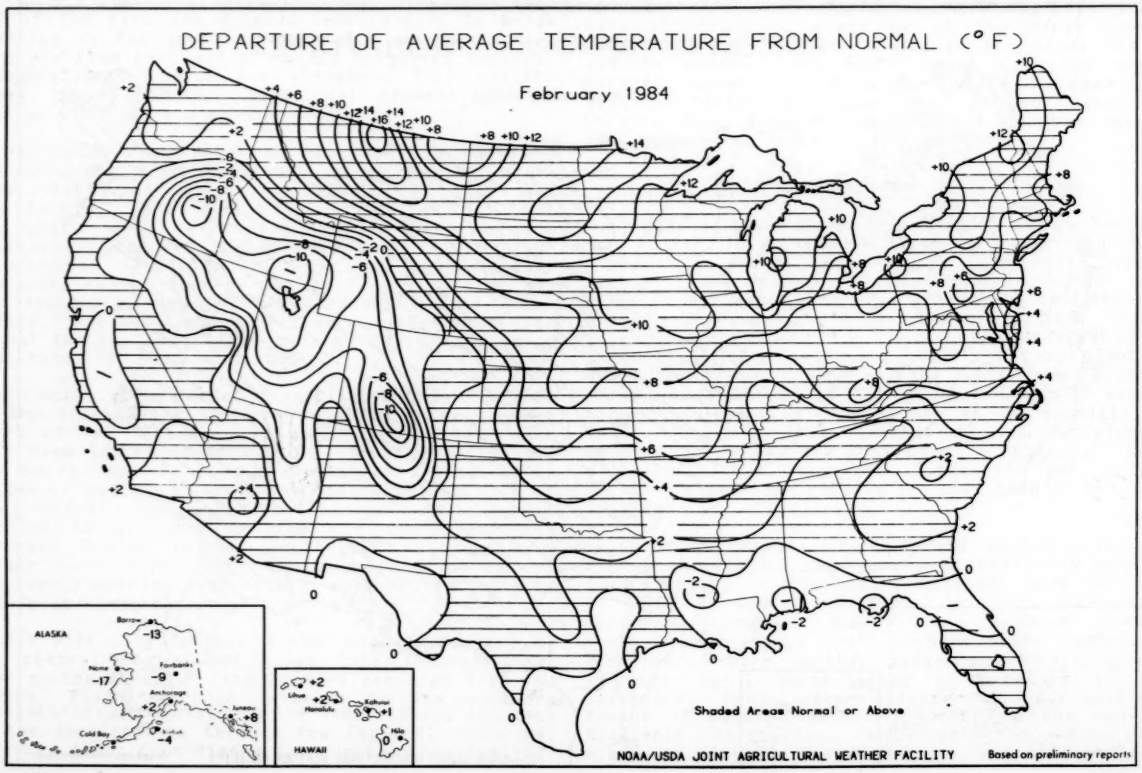
Heavy snow at midmonth and again at the month's end halted fertilizing of small grains and land preparation across much of the Corn Belt. Above normal temperatures during February melted snow cover across the North, and stimulated early spring growth of crops and pastures in the South. Widespread precipitation continually delayed early planting in the Southeast. However, corn planting was underway across the extreme South from Texas to Florida by the end of the month. Progress ranged from just starting in Georgia to 2% complete in Texas. Southern Texas sorghum growers had planted 2% of the crop by the last week in February. Land preparation and preplant irrigation of cotton fields progressed rapidly in California and the Southwest.

Tobacco growers prepared and seeded plantbeds across the South. However, wet conditions delayed transplanting in Florida. Plantbeds were in fair to mostly good condition in the Southeast. Northern producers pruned, and applied dormant sprays to deciduous fruit orchards when conditions permitted. Warm weather pushed peach development as much as 1 month ahead of schedule in the Southeast. Producers were concerned about possible damage if colder weather returned to the region. Vegetable harvesting, and spring planting was active in Florida, Texas, Arizona, and California.


TOTAL PRECIPITATION, INCHES
February 1984
GREATER THAN 4 INCHES
GREATER THAN 8 INCHES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports
ALASKA
HAWAII


PERCENTAGE OF NORMAL PRECIPITATION
February 1984
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports
ALASKA
HAWAII


AVERAGE TEMPERATURE (°F)
February 1984
ALASKA
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
February 1984
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Temperature and Precipitation Data for February 1984

States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
AL BIRMINGHAM	47	1	2.7	- 2.0
MOBILE	52	- 2	4.8	- .1
MONTGOMERY	51	1	4.3	- .2
AK ANCHORAGE	19	1	1.1	.2
BARROW	- 33	-13	.2	.0
FAIRBANKS	- 13	- 9	.6	.2
JUNEAU	36	8	5.5	1.8
KODIAK	25	- 4	5.5	- .8
NOME	- 14	-17	T	- .5
AZ FLAGSTAFF	33	2	.1	- 1.9
PHOENIX	60	4	0	- .6
TUCSON	54	0	0	- .6
WINSLOW	36	- 2	.2	- .3
YUMA	62	2	0	- .3
AR FORT SMITH	45	3	2.6	.1
LITTLE ROCK	48	4	3.9	.1
CA BAKERSFIELD	51	- 2	.1	- 1.0
EUREKA	50	1	5.2	.0
FRESNO	51	0	1.1	- .8
LOS ANGELES	58	1	T	- 2.5
RED BLUFF	49	- 1	1.9	- 1.4
SAN DIEGO	60	2	.1	- 1.3
SAN FRANCISCO	53	1	1.5	- 1.7
STOCKTON	49	- 1	1.2	- .8
CO DENVER	34	0	.8	.1
GRAND JUNCTION	32	- 2	.1	- .4
PUEBLO	36	1	.1	- .7
CT BRIDGEPORT	37	6	4.7	1.7
HARTFORD	34	6	4.7	1.5
DC WASHINGTON	44	6	3.4	.8
FL APALACHICOLA	53	- 2	3.9	.3
DAYTONA BEACH	58	- 1	3.4	.3
FORT MYERS	65	1	3.2	1.1
JACKSONVILLE	56	1	4.7	1.2
KEY WEST	71	1	4.1	2.2
MIAMI	69	1	.7	- 1.4
ORLANDO	61	- 1	2.7	- .1
TALLAHASSEE	54	0	6.6	1.6
TAMPA	63	2	3.3	.3
WEST PALM BEACH	67	1	4.5	1.9
GA ATLANTA	47	2	6.0	1.6
AUGUSTA	50	2	4.9	.9
MACON	52	3	3.6	- 1.0
SAVANNAH	54	2	3.2	.0
HI HILO	71	0	10.1	- 3.4
HONOLULU	75	2	.6	- 2.1
KAHULUI	73	1	.3	- 3.0
LIHUE	74	3	1.2	- 2.5
ID BOISE	30	- 6	.9	- .2
LEWISTON	41	2	.5	- .4
POCATELLO	20	-10	2.1	1.2
IL CAIRO	44	5	3.2	- .2
CHICAGO	34	8	1.4	- .1
MOLINE	35	10	.8	- .5
PEORIA	35	8	2.3	.9
ROCKFORD	32	9	1.3	.1
SPRINGFIELD	36	6	2.0	.2
IN EVANSVILLE	39	2	2.6	- .4
FORT WAYNE	33	7	1.5	- .5
INDIANAPOLIS	37	7	3.2	.7
SOUTH BEND	36	10	1.5	- .5
IA BURLINGTON	--	--	--	--
DES MOINES	35	9	.8	- .3
DUBUQUE	31	10	1.1	- .2
SIOUX CITY	32	9	1.1	.2
KS CONCORDIA	40	9	.6	- .2
DODGE CITY	41	6	.2	- .4
GOODLAND	34	2	1.5	1.1
TOPEKA	40	7	1.3	.2
WICHITA	41	6	1.2	.3
KY LEXINGTON	41	6	3.3	.0
LOUISVILLE	42	6	1.7	- 1.5
LA BATON ROUGE	53	- 1	6.6	1.6
LAKE CHARLES	56	2	5.4	1.5
NEW ORLEANS	54	- 1	5.3	.1
SHREVEPORT	50	0	5.7	2.2
ME CARIBOU	22	9	3.0	.9
PORTLAND	32	9	5.0	1.4
MD BALTIMORE	42	7	3.9	.9
MA BOSTON	38	7	7.8	4.1
CHATHAM	37	6	5.8	1.6
MI ALPENA	28	10	.8	- .5
DETROIT	33	7	1.3	- .4
FLINT	31	8	.5	- 1.0
GRAND RAPIDS	34	10	1.1	- .4
HOUGHTON LAKE	28	10	.9	- .4
LANSING	33	10	.9	- .7
MARQUETTE	25	11	3.7	2.2
MUSKEGON	32	8	1.2	- .5
SAULT STE. MARIE	24	10	1.9	.2
MN DULUTH	23	11	.6	- .3
INT'L FALLS	21	14	.8	.1
MINNEAPOLIS	28	10	1.6	.7
ROCHESTER	25	8	2.0	1.3
SAINT CLOUD	26	12	.8	.0
MS JACKSON	50	1	4.7	.2
MERIDIAN	48	- 1	4.8	.2
MO COLUMBIA	40	7	3.2	1.3
KANSAS CITY	39	7	2.0	.8
SAINT LOUIS	40	6	3.4	1.3
SPRINGFIELD	43	7	3.5	1.4
MT BILLINGS	38	10	.9	.2
CLASGOW	34	8	.2	- .2
GREAT FALLS	37	10	.7	- .1
HAVRE	36	16	.3	- .1
HELENA	32	6	.2	- .2
KALISPELL	32	6	.7	- .3
MILES CITY	35	11	.1	- .3
MISSOULA	32	4	.4	- .4
NE GRAND ISLAND	35	8	1.7	.9
LINCOLN	36	9	1.3	.3
NORFOLK	31	7	2.3	1.5
NORTH PLATTE	33	6	.9	.3
OMAHA	34	9	.8	- .2
VALENTINE	32	8	.3	- .2
NV ELY	30	1	.4	- .3
LAS VEGAS	50	0	T	- .5
RENO	37	0	.2	- .8
WINNEMUCCA	34	- 2	.9	.7
NH CONCORD	30	8	5.1	2.6
NJ ATLANTIC CITY	40	7	3.7	.4
TRENTON	--	--	--	--
NM ALBUQUERQUE	40	1	T	- .4
ROSWELL	--	--	--	--
NY ALBANY	32	9	3.0	.7
BINGHAMTON	33	11	3.4	1.1
BUFFALO	34	9	3.6	1.2
NEW YORK	39	6	4.3	1.2
ROCHESTER	32	8	3.0	.7
SYRACUSE	32	8	2.9	.2
NC ASHEVILLE	40	1	6.4	2.8
CHARLOTTE	45	2	5.9	2.1
GREENSBORO	44	4	5.3	1.9
HATTERAS	49	2	4.3	.3
RALEIGH	46	4	5.7	2.3
WILMINGTON	50	3	4.8	1.4
ND BISMARCK	28	13	.3	- .2
FARGO	25	14	.9	.5
WILLISTON	31	6	.1	- .4
OH AKRON-CANTON	36	9	3.0	.8
CINCINNATI	38	6	2.4	- .3
CLEVELAND	35	8	3.8	1.6
COLUMBUS	37	7	2.0	- .2
DAYTON	36	6	2.7	.6
TOLEDO	33	7	1.2	- .6
YOUNGSTOWN	35	9	2.4	.2
OK OKLAHOMA CITY	45	4	1.1	- .7
TULSA	46	5	2.0	.3
OR ASTORIA	45	1	8.4	.6
BURNS	23	-11	.8	.5
MEDFORD	43	1	2.5	.4
PENDLETON	40	1	1.7	.6
PORTLAND	46	3	3.9	.0
SALEM	44	1	5.5	.9
PA ALLENTOWN	37	8	3.7	.7
ERIE	36	11	2.4	.3
HARRISBURG	37	5	4.5	1.8
PHILADELPHIA	39	6	2.8	.0
PITTSBURGH	36	7	2.1	- .3
SCRANTON	36	9	2.9	.8
RI PROVIDENCE	37	8	7.2	3.5
SC CHARLESTON	53	3	3.5	.1
COLUMBIA	48	1	4.9	.9
GREENVILLE	46	2	7.1	2.7
SD ABERDEEN	30	14	.7	.1
HURON	31	13	.7	- .1
RAPID CITY	36	8	.2	- .4
SIOUX FALLS	28	9	1.1	.2
TN CHATTANOOGA	43	1	4.4	- .3
KNOXVILLE	43	1	4.4	.2
MEMPHIS	48	4	4.4	.1
NASHVILLE	43	3	2.4	- 1.6
TX ABILENE	50	2	.5	- .5
AMARILLO	40	0	.4	- .2
AUSTIN	56	3	1.0	- 1.5
BEAUMONT	56	1	4.3	.6
BROWNSVILLE	62	- 1	.4	- 1.2
CORPUS CHRISTI	59	- 1	.4	- 1.2
DEL RIO	57	1	.2	- .7
EL PASO	47	- 1	0	- .5
FORT WORTH	51	2	3.1	1.2
GALVESTON	57	1	1.2	- 1.1
HOUSTON	54	- 1	4.4	1.1
LUBBOCK	45	2	.2	- .4
MIDLAND	48	0	.2	- .4
SAN ANGELO	50	0	.6	- .2
SAN ANTONIO	54	0	.6	- 1.3
VICTORIA	57	0	1.3	- .9
WACO	51	0	1.0	- 1.0
WICHITA FALLS	47	2	.8	- .2
UT BLANDING	34	1	.3	- .7
SALT LAKE CITY	26	- 8	.9	- .4
VT BURLINGTON	29	11	2.7	1.0
VA LYNCHBURG	43	6	5.4	2.5
NORFOLK	47	6	4.7	1.4
RICHMOND	45	6	4.0	.9
ROANOKE	44	6	4.9	1.7
WA COLVILLE	33	2	1.1	- .4
OMAK	35	5	1.0	- .1
QUILLAYUTE	44	2	13.8	1.7
SEATTLE-TACOMA	45	2	3.9	- .3
SPOKANE	35	3	1.4	- .2
WALLA-WALLA	41	0	2.6	1.2
YAKIMA	38	2	.9	.2
WV BECKLEY	38	6	4.1	.9
CHARLESTON	42	6	2.6	- .5
HUNTINGTON	42	6	2.1	- .7
PARKERSBURG	--	--	--	--
WI GREEN BAY	28	10	1.6	.5
LA CROSSE	30	10	.8	- .1
MADISON	30	9	1.3	.3
MILWAUKEE	33	10	1.2	- .1
WY CASPER	28	1	.5	- .1
CHEYENNE	28	- 1	.8	.4
LANDER	20	- 6	1.2	.6
SHERIDAN	33	7	.5	- .3
PR SAN JUAN	78	1	3.2	1.2

· Based on 1951-80 normals.

Heating Degree Days (Base 65° F.)

February 1984

ALA. Birmingham	510	MAINE, Caribou	1229	OKLA. Okla. City	561
Mobile	363	Portland	949	Tulsa	533
Montgomery	412	MD. Baltimore	671	OREG. Astoria	559
ALASKA, Anchorage	1319	MASS. Boston	790	Burns	1210
Barrow	2848	Chatham	798	Medford	633
Fairbanks	2277	MICH. Alpena	1054	Pendleton	729
Nome	2270	Detroit	912	Portland	546
ARIZ. Flagstaff	929	Flint	977	Salem	597
Phoenix	139	Grand Rapids	892	PA. Allentown	813
Tucson	323	Houghton Lake	1062	Erie	847
Winslow	838	Lansing	936	Harrisburg	817
Yuma	102	Marquette	1145	Philadelphia	756
ARK. Fort Smith	574	S. Ste. Marie	1193	Pittsburgh	823
Little Rock	499	MINN. Duluth	1210	Scranton	837
CALIF. Bakersfield	411	Internatl Falls	1276	R.I. Providence	804
Eureka	429	Minneapolis	1082	S.C. Charleston	347
Fresno	408	Rochester	1142	Columbia	485
Los Angeles	182	St. Cloud	1135	Greenville	553
Red Bluff	458	MISS. Jackson	440	S. DAK. Aberdeen	1001
Stockton	455	Meridian	490	Huron	978
San Diego	134	MO. Columbia	720	Rapid City	831
San Francisco	342	Kansas City	750	Sioux Falls	1072
COLO. Denver	889	St. Louis	705	TENN. Chattanooga	626
Grand Junction	959	Springfield	641	Knoxville	619
Pueblo	834	MONT. Billings	769	Memphis	499
CONN. Bridgeport	819	Glasgow	885	Nashville	621
Hartford	883	Great Falls	810	TEX. Abilene	431
D.C. Washington	610	Havre	827	Amarillo	709
FLA. Apalachicola	333	Helena	941	Austin	280
Ft. Myers	76	Kalispell	959	Beaumont	263
Jacksonville	262	Miles City	860	Brownsville	138
Key West	8	Missoula	947	Corpus Christi	196
Miami	38	NEBR. Grand Island	877	Del Rio	240
Orlando	137	Lincoln	840	El Paso	514
W. Palm Beach	60	Norfolk	969	Fort Worth	401
Tallahassee	320	North Platte	915	Galveston	228
Tampa	115	Omaha	896	Houston	325
GA. Atlanta	503	Valentine	952	Lubbock	566
Augusta	424	NEV. Ely	1018	Midland	481
Macon	386	Las Vegas	424	San Angelo	422
Savannah	320	Reno	801	San Antonio	315
IDAHO, Boise	1004	Winnemucca	881	Victoria	230
Lewiston	697	N.H. Concord	995	Waco	390
Pocatello	1291	N.J. Atlantic City	714	Wichita Falls	509
ILL. Cairo	618	N. MEX. Albuquerque	714	UTAH, Milford	1150
Chicago	894	N.Y. Albany	939	Salt Lake City	1130
Moline	880	Binghamton	917	VT. Burlington	1044
Peoria	849	Buffalo	899	VA. Lynchburg	622
Rockford	952	New York	740	Norfolk	522
Springfield	835	Rochester	917	Richmond	589
IND. Evansville	747	Syracuse	949	Roanoke	614
Fort Wayne	908	N.C. Asheville	706	WASH. Colville	-
Indianapolis	796	Charlotte	562	Quillayute	601
South Bend	838	Greensboro	600	Seattle-Tacoma	577
IOWA, Des Moines	851	Hatteras	466	Spokane	880
Dubuque	988	Raleigh	553	Walla Walla	690
Souix City	956	Wilmington	417	Yakima	780
KANS. Concordia	718	N. DAK. Bismarck	1067	W. VA. Beckley	781
Dodge City	699	Fargo	1154	Charleston	674
Goodland	892	Williston	983	Huntington	667
Topeka	713	OHIO. Akron-Canton	831	WIS. Green Bay	1054
Wichita	680	Cinncinnati	773	Madison	1006
KY. Lexington	685	Cleveland	878	Milwaukee	910
Louisville	673	Columbus	796	WYO. Casper	1082
LA. Baton Rouge	338	Dayton	827	Cheyenne	1058
Lake Charles	265	Toledo	920	Lander	1287
New Orleans	321	Youngstown	850	Sheridan	935
Shreveport	421				

Based on 1951-80 normals.

National Agricultural Summary

February 27 to March 4

HIGHLIGHTS: Heavy rains delayed spring fieldwork once again in the Southeast, while snow halted outdoor activities from the Corn Belt into the Northeast. In the extreme South, early planting of crops resumed after midweek as fields began to dry. Farmers had up to 2 days suitable for fieldwork in the Southeast and 6 days available in the Southwest. Soil moisture supplies were generally rated adequate to surplus, except in the Southwest and portions of the southern Plains where supplies were short.

Winter wheat was in fair to good condition in the major producing areas. The crop was greening from the central Plains through the southern Corn Belt, and stands were jointing in portions of the southern Plains. Corn planting was underway from Texas to Georgia, but sorghum planting centered in southern Texas. Cotton planting was confined to Arizona as cool soil temperatures delayed planting in Texas. Tobacco growers prepared plantbeds and in some areas seeded the crop. Transplanting was delayed by wet fields in the extreme Southwest. Vegetable planting and harvesting was slowed by wet conditions in the South, but continued active in Arizona and California. Frost caused light to moderate damage to vegetables in central and southwest Florida, some replanting was scheduled. Early peach varieties began blooming as far north as South Carolina. Pastures were in poor to fair condition, but improving. Livestock were in mostly fair to good condition. Supplemental feeding was widespread because of snow and muddy conditions in the eastern half of the Nation.

SMALL GRAINS: Wheatlands were in fair to good condition. Stands were greening from the central Plains through the Corn Belt and jointing across portions of the South. Spring seeding of oats and barley was active from the Lower Plains into the Corn Belt.

Kansas producers actively topdressed winter wheat. Stands were in mostly good condition with only light wind damage. Insect and disease problems were minimal. Warm weather and adequate soil moisture improved the outlook for Oklahoma's wheat. The crop was rated good, with minor wind damage in central and south-central areas. Insect activity was light, but weeds continued to plague producers. Wheat and oats began greening up on the Texas Plains. Stands looked good in Central Texas and in the Blacklands, but need additional moisture to ensure good growth. Wheat was beginning to joint in some areas and was rated mostly fair to good. Montana's winter wheat continued in good condition with little or no snow cover. Fertilizing of small grains was halted by snow and wet conditions in the Corn Belt.

OTHER CROPS: Corn planting was underway across the South from Texas to Georgia. However, planting was slowed by heavy rain from Louisiana to Georgia. Some early planted fields had emerged in the extreme South. Heavy snow halted land preparation in much of the Corn Belt. Texas producers had planted 7% of the corn, 3 percentage points ahead of schedule. Sorghum planting in Texas was 6% complete, 1 point ahead of normal. Arizona cotton producers continued land preparation, preplant irrigation, and herbicide application. Planting started in the Yuma area. Cold soil temperatures delayed cotton planting in the Rio Grande Valley of Texas. Tobacco growers prepared plantbeds and seeded the crop. Transplanting was delayed by wet conditions in Florida and Georgia. Sugarcane harvesting continued in Texas, but the remaining cane will go to molasses production rather than sugar. Young cane in Florida was hurt by cold temperatures, but growers expect the crop to recover with warmer weather.

FRUITS AND NUTS: Deciduous fruit growers continued pruning and applying dormant sprays. Cold temperatures pushed into the Southwest, but no significant peach damage was reported. Early peach varieties were blooming in South Carolina and Georgia, while other varieties approached the bloom stage.

Florida's citrus groves were in good condition. Frost at midweek caused very little damage, and new growth and bloom buds continued to develop. Early and midseason orange picking was virtually complete. Early blooming fruit trees were damaged by cooler temperatures in East Texas, but the extent of the damage is unknown. Citrus producers in the Rio Grande Valley continued pruning trees. Arizona's harvest of lemons, grapefruit, tangerines, and Valencia oranges continued with seasonal volumes being packed. Citrus groves were rated good.

California had excellent weather for pollination and bee activity. Early apricots and Cling peaches continued to bloom. Cherry buds were swelling and growers reported high bud counts. Early plums were past full bloom and some growers sprayed orchards to prevent frost damage. The almond bloom was heavy. Citrus harvesting continued in the desert area. Navel orange demand was moderate and quality was reported good in the San Joaquin Valley.

VEGETABLES: A cold front pushed into Florida's vegetable areas at midweek, causing light to moderate frost damage in central and southwest regions. Sweet corn away from Lake Okeechobee received heavy damage and growers plan some replanting. Total shipments declined 3% from the previous week. Supplies of snap beans, carrots, eggplant, okra, potatoes, and strawberries increased, while cabbage, celery, Chinese cabbage, escarole, parsley, and radishes remained steady. Winter potato digging gained momentum. Good strawberry supplies are expected through April.

Spring vegetable planting continued in Texas. Transplant shortages were reported in some areas because of the December freeze. Harvesting of greens, cabbage, and carrots continued in the Rio Grande Valley. Winter vegetables were showing improved quality and yields. Arizona's spring lettuce harvest got underway in the Yuma and Parker-Poston areas. Light volumes of asparagus, cabbage, cauliflower, and broccoli were packed in the Yuma area. Heavier volumes of carrots and cabbage were harvested in the Salt River Valley. Melon planting started in the Yuma area.

Warm, dry days were favorable for vegetable planting in California. Asparagus harvesting increased in the Desert, but was slow in the other districts. Broccoli and cauliflower harvesting was active along the central and southern coasts. Celery transplanting increased on the central coast, while harvesting continued active along the southern coast. Lettuce harvesting neared completion in the Imperial Valley and reached peak levels in the Palo Verde Valley. Tomato planting continued active. Strawberry volumes were higher than last year along the southern coast and in the Santa Maria area.

PASTURES AND LIVESTOCK: Southern pastures were in poor to fair condition. Warmer weather and abundant moisture supplies promoted grass growth. Livestock were in fair to good condition. Producers continued heavy supplemental feeding because of snow and muddy conditions across much of the East. Calving and lambing continued active. Spring sheep shearing became more widespread.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Snow across State early in week. Temperatures 5 to 7° below normal. Rainfall under 0.10 in. south to over 1.00 in. north.

ARIZONA: Sunny skies southern half, partly cloudy northern half. No precipitation reported. Warming trend, daytime highs upper 50's, lower 60's in high country, mid, upper 60's at 5,000 ft. level, 70's, 80's lower deserts by weekend. Average temperatures 2° below normal to 6° above.

Range, pasture conditions below normal mid-elevations, desert areas, stock water supplies mostly short. High elevations conditions normal, adequate stock water supplies. Soil moisture supplies short most areas. Cattle, calves fair to good, sheep fair condition. Pastures, ranges supplied average feed northeast, some central areas, short supplies other areas. Insect damage to pastures, ranges light to none. Spring lettuce harvest underway Yuma, Parker-Poston areas. Harvest started Salt River Valley west side, will begin Scottsdale area by March 9. Volumes increasing Yuma, peak harvest expected by March 15. Light volumes asparagus, cabbage, cauliflower, broccoli packed Yuma, heavier volumes carrots, cabbage harvested Salt River Valley, prices good. Greens, green onions moved in volume, mixed vegetable harvests active. Potato planting increased Salt River Valley. Melon planting started Yuma, expected to start Mohave Valley by March 9. Spring lettuce Willcox, Marana good condition. Pecan harvest winding down Marana. Cotton seedbed preparation, pre-irrigation active, pre-plant herbicides applied. Few Yuma growers started planting. Wheat, barley good growth. Over half acreage jointed, 40% Yuma crop headed, few early fields turning color. Alfalfa good condition, weed, insect controls applied. Lemon, grapefruit, tangerines, Valencia harvests continued, seasonal volumes packed. Citrus groves good condition.

ARKANSAS: Cool week with temperatures 2 to 7° below normal. Highest 70°, lowest 15°. Good rainfall at beginning and end of week with large area of snow at first of week across northwest and north central sections. Most precipitation 3.46 in., least 0.92 in.

Winter wheat in good condition. Nitrogen fertilization virtually finished. Pastures improving, but supplemental feeding necessary. Cattle fair. Fruit trees in good conditon, showing little budding. Too wet for land preparation. Weekend down pours caused minor flooding.

CALIFORNIA: A weak disturbance sped across the extreme northern end of the State and dropped a spotty few hundredths of an inch of rain. Otherwise, the State was dry. Weekly mean temperatures ranged a few degrees above normal over the Sierra and along the Central and South Coasts. In the great Central Valley, weekly means generally ranged a few degrees either side of normal; spotty reports of minimum temperatures a few degrees below freezing were noted there.

Favorable weather, weed control, fertilization. Winter wheat progressing, near boot stage. Barley, oats growing. Greenchopping oats. Desert alfalfa harvested. Sugarbeets good. Safflower up. Cotton planting in 2 weeks. Excellent weather for pollination and bee activity. Early apricots blooming. Hass avocado harvest continuing in southern counties. Cherry buds swelling. most growers reporting high bud counts. Herbicides applied to raisin grape berms. Pruning continuing in wine grapes in the north coast area. Kiwifruit buds pushed out in Sacramento Valley. Early cling peaches continued to bloom, many in pink bud stage. Early plums past full bloom peak, some growers applied water to prevent frost. Prune trees blooming. Desert citrus harvest continued. Navel orange demand moderate, quality good in San Joaquin Valley. Valencia oranges planted, Fresno County. Almond pollination weather best in years. Bees active, bloom heavy. Male pistachio buds swelled, Sacramento Valley. No precipitation, warm days favorable for vegetable planting, growth. Artichoke volume below normal. Asparagus harvest increased Desert, continued slow other districts. Broccoli, cauliflower harvests active, most volume Central, South Coasts. Cantaloup planting near completion Desert. Celery transplanting increased Central Coast. Harvest active South Coast. Lettuce harvest nearing completion Imperial Valley, peak levels Palo Verde Valley. Potato shipments normal Tulelake-Butte Valley. Strawberry volume above last year South Coast, Santa Maria. Planting market tomatoes active San Joaquin Valley. Planting processing tomatoes active San Joaquin Valley, increasing Sacramento Valley. Ranges good to excellent condition, however southern districts need additional rains maintain growth. Calving, lambing active most State. Fed lambs moving slaughter market. Some sheep still on alflafa pastures San Joaquin Valley.

COLORADO: Mostly dry over State until 3rd and 4th when a combined weather system moved through State bringing snow to most areas. Amounts were mostly light with 0.25 to 1.50 in. moisture common in the eastern foothills while amount varied between 1.10 and 2.10 in. elsewhere. Temperature dropped on 3rd and 4th but for the period as a whole temperatures varied only 1 to 2° from normal in most locations. The major exception was in San Luis Valley where temperatures were 5 to 10° below normal for period.

FLORIDA: Widespread rain and thunderstorms beginning a day earlier, continued, 27th, north and central with rainfall from 1.00 to 3.00 in. Amounts of less than 0.50 in. common in south, 27th to 28th. A hard freeze (23 to 30°) some frost was reported in the north, morning of the 1st; patchy frost, some heavy, blanketed north, portions of central, reaching into northern Everglades. Mild days, cool nights prevailed at weekend with no rain.

Soil moisture adequate south, mostly surplus elsewhere. Land preparation active where soils sufficiently dry. Corn planting continues, early plantings up. Transplanting tobacco about ready to begin. Top dressing small grains slow due to wet fields. Sugarcane harvest complete. Young cane hurt some by cold temperatures expected to grow out with warmer weather. Pastures mostly poor to fair from central to Panhandle areas, improving south. Cattle condition fair to good. Supplemental feeding continues. Citrus grove condition good. Cold most areas with frost in some groves; very little damage. New growth and bloom buds continue to progress. Soil moisture adequate to surplus in low groves. Early and mid orange harvest all but over Harvest of damaged Valencias slowing with most already moved. A cold front entered the vegetable growing areas midweek. Below freezing temperatures, scattered

frost occurred several mornings central, southwest areas. Damage to vegetables generally light to moderate. Temperatures in the 20's dipped into the Everglades. Sweet corn away from Lake Okeechoree received heavy damage, some replanting scheduled. Cold winds caused some light to moderate damage southeast and southwest areas. Overall shipments declined 3% during week. Crops declining were cauliflower, sweet corn, lettuce, peppers, tomatoes. Crops gaining in supply were snap beans, carrots, eggplant, okra, potatoes, strawberries; remaining steady were cabbage, celery, Chinese cabbage, escarole, parsley, radishes. Digging winter potatoes continues to gain. Quality, yields good. Strawberry picking making comeback from cold damage in December. Good supplies expected through April.

GEORGIA: Near normal temperatures with general rainfall first half of week. Light snow northern counties on 28th. Colder latter half of period. Average precipitation 1.75 to 2.00 in. Statewide. Average temperatures upper 30's mountains to low 50's southeast, some 5 to 8° below normal. Light rain (near 0.10 in.) extreme north early 27th. A dry weekend on 3rd and 4th temperatures moderating to near normal 4th.

Soil moisture adequate to surplus. Small grains mostly fair to good. Limited corn planting in southern areas. Topdressing small grains active north. Rains early in week delayed fieldwork but activity resumed midweek south. Peaches blooming central and south end week, no significant damage from freezing temperatures early in week. Tobacco plants fair, still no transplanting. Pastures fair. Cattle and hogs good.

HAWAII: Variable weather conditions continued to prevail over the Islands. Most crops made good progress. Sunny skies with some afternoon cloudiness dominated weather during the first half of the week. Rainfall was light and mainly restricted to the interior section of most Islands. Cloud cover, and rainfall increased considerably later in the week. Moderate showers were received on lst and sporadically over the weekend. Gusty winds accompanied the rain, but little damage was reported. Overnight temperatures fell to the mid-sixties.

Supplies of head cabbage and Chinese cabbage expected to remain heavy in the coming weeks. Head lettuce production will increase after dropping last week due to the rainy weather. Papaya and banana production relatively light, but orchard conditions continue to improve.

IDAHO: A series of weak pacific weather systems imbedded in a northwesterly flow moved across the State during the week. Most of the precipitation fell in the north and the southeast while the rest of the State received light amounts in the valleys and varying amounts of snow in the mountains. Over all precipitation was below normal except in the extreme southeast where most stations reported above normal. Temperatures were 2 to 4° above normal in the north. The rest of the State was below normal with the southeast reporting temperatures 10 to 15° below normal.

The pace of spring lambing and calving increased as nearly all areas reported some activity. Farmers were contracting some crop acreage. A few reports of seed potato sorting were received. Feed supplies were generally adequate but hay was in short supply in some areas. Ash was being applied to some winter wheat fields.

ILLINOIS: Temperatures 1° above normal to 8° below normal. Precipitation, none to 1.91 in. Heaviest south.

Soil moisture 1% short, 77% adequate, 22% surplus. Wheat condition 6% excellent, 63% good, 30% fair, 1% poor. Livestock condition mostly fair. Hay supplies 55% short, 45% adequate.

INDIANA: Possibly heaviest snow storm of season past week. Temperatures 6 to 15° below normal. Precipitation widespread. Water equivalent from 0.25 in. north and west central to 1.00 to 1.50 in. east central and south. Heavy snow halted virtually all outside activity except snow removal. Activities included caring for livestock, shop work, maintenance, and usual chores.

IOWA: A mild week with precipitation at the weekend falling as rain over the south and east and as snow or rain over the northwest. Frost has gone out of the soils over most of the south and east.

KANSAS: Precipitation averaged less than 0.20 in. northwest and north central, 1.50 in. southeast and 0.25 to 0.50 in. south central through northeast. Temperatures averaged 34° northwest to 40° southeast ranging 1° below normal southwest to 1 to 2° above normal north central and northeast.

About 35% oats and 25% barley seeded. Some top dressing of wheat. Some light wind damage and very few reported cases of disease infestation. No insect damage reported. Adequate soil moisture. Calving and lambing in full swing.

KENTUCKY: Temperatures averaged close to seasonal normals; highs mostly 45 to 50°, lows 30 to 35°. Precipitation about normal with snow early and less amounts precipitation at midweek. Totals in 0.50 in. range.

Heaviest snowfall of year in some counties increased need for livestock care and supplemental feed. Little or no fieldwork but farmers were getting machinery ready and making other preparations for spring activity.

LOUISIANA: Rainfall heavy north, light south. Greatest weekly total 6.16 in. Temperatures averaged 4 to 8° below normal. High 76°, low 26°.

Soil moisture surplus. Days suitable for fieldwork 1.7. Spring plowing 9% 1984, 9% 1983, and 18% average. Corn planted 1% complete 1984, 0% 1983, and 2% average. Winter wheat condition fair to good. Top dressing of wheat active. Pasture and vegetable condition poor to fair. Sugarcane and livestock condition fair.

MARYLAND AND DELAWARE: Maryland: Temperatures averaged 1 to 3° below normal, except in west where temperatures were as much as 6° below normal. Maximum temperatures occurred on the 25th and ranged from the mid 50's to mid 60's with maximum temperatures reaching near 50 in the west. Minimum temperatures were in the low to mid 20's with the lowest temperatures of 9 reported at Oakland. Precipitation was mostly around 0.50 in. but did reach 1.11 in. at Frederick, 1.40 in. at Oakland and 1.99 in. at Patuxent.

Delaware: Temperatures averaged 2° below normal north, normal in the central region and 1° above normal south. High temperatures were recorded on the 25th when temperatures reached into the mid 50's north and mid 60's central and south. Low temperatures recorded on lst when temperatures fell to the high teens north and south and the low 20's in the central area.

Precipitation averaged 0.67 in. with lighter amounts north.

MICHIGAN: Winter returned to the State. Temperatures averaged 3° below normal. Precipitation was light to moderate. A major storm left 1 to 6 in. of snow over the southern portion of the lower Peninsula during the early part of the week.

MINNESOTA: Temperatures 2 to 6° above normal. High 41°, low -7°. Precipitation 0.13 to 0.76 in. above normal for the central 1/3 of the State and southwest, and near normal to 0.09 in. below normal elsewhere. Highest weekly total was 1.26 in. Snowfall a trace to 3 in. for northern 1/3 of State and 5 to 11 in. elsewhere. Snow depth at weeks end 5 to 8 in. for west central, central, east central, northwest and southeast, and 9 to 16 in. elsewhere.

MISSISSIPPI: Temperature 1 to 8° below normal. Extremes 18 and 79°. Snow fell over entire State but no accumulation except extreme northern counties. Greatest 24-hour rainfall 3.35 in.

Soil moisture surplus to adequate. There were 1.0 days suitable for fieldwork. Plowing for spring planting was 14% completed compared with 9% last year. Corn planting was just getting underway. Winter wheat was 7% jointing compared with 8% last year. The wheat crop in fair condition. Feed and hay supplies were short to adequate. Livestock condition fair to poor.

MISSOURI: Temperatures ranged 3 to 5° below normal for the State. Heavy snow covered most of State early in the week. Precipitation totaled 2.00 to 3.00 in. in southwest and 1.50 in. in east central. Up to 22 in. of snow fell in central areas.

Topsoil moisture supplies are 31% surplus, 67% adequate and 2% short. Winter wheat condition rated 2% excellent, 39% good, 46% fair, and 13% poor. Cattle and hog losses due to unfavorable weather 54% normal, 44% moderate, and 2% severe. General livestock condition 28% good, 69% fair and 3% poor.

MONTANA: Continued mild week, temperatures 4 to 9° above normal. Light precipitation fell first and last of week. Precipitation generally below normal.

Winter wheat in good condition despite poor snow cover. Wind damage light. Feed supplies and stock water supplies generally adequate. Mild weather reducing demand for feed and providing good calving and lambing conditions. Calving and lambing about 20% complete.

NEBRASKA: Mild week. Average temperatures near to 4° above normal. Dry until end of week when rain and snow spread across State. Average precipitation ranged from traces west to 0.50 in. central and east.

NEVADA: Ridging both at surface and aloft pushed most precipitation activity to north of State. Cooler weather spread across eastern sections by end of period. Only trace amounts precipitation reported during week and that confined to extreme north. Temperatures mostly above normal throughout period. Exceptions valley locations far north and northeast where below normal persisted. Extremes: 74 and 5°.

Fieldwork gaining momentum extreme south. Mild, sunny weather stimulating growth winter grains. Dry weather easy on newborn calves and lambs.

NEW ENGLAND: Precipitation occurred off and on all week with (melted) amounts averaging 1.00 in. South coastal regions received over 2.00 in. Most of New England experienced at least a trace of snow, with accumulations of up to 13 in. in interior mountain areas. Temperatures averaged 5 to 10° below normal. Warm temperatures early in the week gave way to progressively colder weather by the weekend. A high of 52° at Falmouth, Mass. on 28th and low of 13° below zero at Clayton Lake, Me. on 4th.

NEW JERSEY: Temperatures averaged 7° below normal. Extremes were 6° on the 2nd and 58° on the 29th. Weekly rainfall averaged 0.71 in. north, 1.40 in. central and 1.2 in. south. The heaviest 24-hour total was 1.44 in. on the 27th to 28th. Estimated soil moisture, in percent of field capacity, averaged 100% north, 100% central and 100% south. Four inch soil temperatures averaged 32° north, 34° central and 36° south.

Soil moisture supply mostly adequate to surplus. Small grain crops generally in good condition. Major farm activities: Caring for livestock, repairing machinery, ordering supplies, making field plans and other winter chores.

NEW MEXICO: Average temperatures were a little below normal in the southeast and near normal elsewhere. A winter storm moving into the State from the northwest began spreading snow over the northern mountains on 4th. That was the only precipitation reported during the week. Minimum temperature -3° northern mountains, maximum 78° southeastern plains.

Soil moisture short to very short. Irrigated small grains fair to good, dryland fair to poor. Potato planting underway in eastern plains. Mesilla Valley onions and lettuce in good condition. Chile planting beginning. Livestock in fair to good condition. Supplemental feeding continues in most areas.

NEW YORK: Cold, wet week. Temperatures averaged 5° below in west, 10° below normal in north. Precipitation 0.75 in. above normal in southern tier, Catskills and Long Island. Precipitation 1.00 in. above normal in west. A large storm moved from the Gulf States and brought heavy precipitation on 28th. Snow fell in west and north. Buffalo got 19 in. of snow on 27th and 28th, and Long Island got over 2.00 in. of rain.

NORTH CAROLINA: Temperatures: 6 to 10° below normal. Precipitation heavy most areas. Soil moisture 43% adequate, 57% surplus. Days suitable for fieldwork: 1.9. Condition: Wheat 35% fair, 65% good; oats 7% poor, 44% fair, 49% good; barley 2% poor, 41% fair, 57% good, rye 40% fair, 58% good, 2% excellent. Pasture 16% poor, 48% fair, 36% good and tobacco beds 40% fair and 60% good. Farm feed supplies: Hay and roughage 32% short, 68% adequate; feed grains 25% short, 75% adequate. Planting Irish potatoes very slow due to wet fields. Major farm activities: Topdressing small grains and pasture, preparing and planting tobacco plant beds, genral farm maintenance, land preparation for spring planting, tending livestock and pruning orchards.

NORTH DAKOTA: Mild temperatures continued. Average temperatures ranged from 4° above normal southwest to 8° above normal east central. The highest temperature was at Dickinson and Williston with 53°. The lowest temperature was -5° at Hurdsfield. Precipitation was normal central to below normal west and east ranging from 0.03 in. southwest to 0.13 in. east central. Snow depths ranged from a trace southwest to 8 in. north central.

Mild temperatures and lack of new snow cover for many areas left wintering crops poorly protected. Average snow depth just over 1.50 in.

Winter crops mostly fair condition at present. Calving and lambing underway most areas. Calving 11% complete, lambing 24% and shearing 33%. Livestock mostly good condition, feed supplies mostly adequate. Studying farm program and determining best seeding options still on minds of most farmers.

OHIO: Temperatures 9 to 12° below normal. Average highs upper 20's to mid 30's, average lows 10 to 20. Soil temperature 4 in. low to mid 30's. Precipitation from 0.50 to 1.50 in. Early week snow depths from 5 to 15 in. from winter storm. Much blowing and drifting. Precipitation late week in the form of rain reduced cover.

Winter wheat fair condition.

OKLAHOMA: Average temperatures below normal across the State ranging from 1° below normal east central to 4° below normal north central. Precipitation averaged from 0.09 in. Panhandle to 2.04 in. northeast.

Warm weather and adequate soil moisture improved outlook for 1984 wheat. Wheat in jointing stage of development in eastern third of State. Minor wind damage mostly confined to central and south central areas. No serious insect activity but weeds continue to plague producers. Wheat and livestock in good to fair condition. Cattle marketings active.

OREGON: Temperatures were 2° above normal except for Baker and Burns which had temperatures 5° below normal. Less than 0.50 in. precipitation fell east of the Cascades and up to 1.80 in, fell westward.

Winter wheat condition mostly good. Evidence of some winter freeze damage beginning to show up. In the east, spring weed control and grain seeding continues in lower elevations. Potato planting has begun in the Hermiston-Boardman area. Westward, recent warm weather has advanced fruit tree development although some pruning and delayed dormant spraying continues. Cranberry pruning and tieing near completion. Livestock in mostly good conditon. Pasture growth improving with warmer days.

PENNSYLVANIA: The week was cool with an average temperature of 24°, 8° below normal. Extremes were 51 and -5°. Precipitation was 0.75 in., just 0.01 in. above normal. Most of the precipitation fell the first part of the week and was mixed between liquid and frozen.

PUERTO RICO: Island average rainfall 0.20 in. or 0.38 in. below normal. Highest weekly total 1.31 in. Highest 24-hour total 0.48 in. Temperature averaged about 75 to 77° on coasts and 69 to 73° Interior Divisions. Mean station temperature ranged from 78.7 to 63.1°. Extremes 91 and 49°.

SOUTH CAROLINA: Weather averaged cooler than usual. Temperatures showed a gradual rise over the weekend. Day time high's ranged from 50's early in week to 60's at end of period. Freezing temperatures occurred over all but immediate coast.

Early peach varieties blooming, other varieties approaching bloom stage. Cold damage minimal. Farmers busy putting down plastic for watermelons. Tobacco beds and small grains in generally good condition. Caring for livestock, farm planning, equipment maintenance and general chores.

SOUTH DAKOTA: Average temperatures 2 to 9° above normal. Extremes: 57 and -7°. A winter storm on 3rd dumped a foot of snow in the southeast and east central part of the State. Precipiation range from a trace to 0.75 in. Western half of the State continues to have below normal precipitation.

TENNESSEE: A deep low pressure system moved across the State early in the week bringing rain Statewide. High pressure dominated from midweek to 3rd. A cold front on 4th brought rain to much of the western two thirds of the State with heaviest in the west. Temperatures averaged from 2 to 7° below normal. Coldest was Crossville with 15° on 1st. Nashville reached 67° on 5th. Precipitation early 27th totaled from 0.50 to 1.00 in. most sections. However, the extreme northeast received only 0.25 in. while the southeast and plateau had up to 1.50 in. On 5th the west received from 2.00 to 3.00 in.

Farmers were busy with caring for livestock and general farm chores.

TEXAS: Early week upper level disturbance southeastward across Central Texas. System produced light showers over North, East Texas, few snow flakes Red River Valley. High pressure kept skies sunny through midweek, until heavy thunderstorms rumbled across eastern part State on 3rd. The 4th, cold front triggered numerous heavy thunderstorms, some severe parts North, South, East Texas. Temperatures generally 1 to 4° below normal, while precipitation amounts generally near normal. Rainfall greater 1.00 in. above normal across East Texas.

Crops: Cold front early week, cooler temperatures, high winds most State. Snow Plains stalled fieldwork. Later week, preplant watering, listing continued. Little moisture Central, South Texas; high winds further depleted soil moisture these regions. Planting corn, grain sorghum pick up soon. East Texas, cooler temperatures damaged early-blooming fruit trees. Cooler soil temperature halted cotton planting Rio Grande Valley; vegetable harvesting continues. Small grains holding own this time, additional moisture promote growth. Plains, wheat, oats looking good, green up, provide grazing limited basis. Irrigated wheat looking better, as well fertilizer fields. Wheat improving in area. Blacklands, Central Texas, wheat looks good, make excellent growth. Beginning to joint, some areas jointing couple of weeks. Oats greening up, with wheat, providing good grazing. Additional moisture ensure fair, good wheat crop. Statewide wheat condition 61% of normal, compared with 77% year ago. Current reported conditions 1% excellent; 20% good; 65% fair; and 14% poor. Corn planting virtually complete Coastal Bend. Corn came up earlier planted fields. Central Texas, some freeze damage earlier fields. Corn planting pick up soon. Cooler weather stalled grain sorghum planting; resume about week, weather permitting. Some preplant watering to aid the soil moisture. Cold front lowered soil temperatures far south Rio Grande Valley, delaying cotton planting. Sugarcane continuing harvest; most remaining cane going to molasses production rather sugar.

Sorghum planted all purposes 6%, 3% 1983, 5% average. Corn planted for all purposes 7%, 3% 1983, 4% average.

Commercial vegetables: Rio Grande Valley, early vegetables good progress. Winter vegetables show improved quality, yield. Harvest greens, cabbage, carrots in progress. Cabbage fair volume. Onions good progress, isolated splits, seed stems reported. Light pruning citrus

trees continues. San Antonio-Winter Garden, spring vegetable planting continues. Onions fair condition, showing thin stands. Transplants short supply due to December freezes. East Texas, spring land preparation, planting continues. Sweetpotatoes bedded or being placed in beds. Some land preparation tomatoes underway. Trans-Pecos, onion planting continues.

Range and livestock: Ranges show some signs of recovery; remain very short. High Plains, ranges fair condition, but more rain needed. Some weeds beginning show up. Numerous range fires Hill Country, where dry ranges pose fire hazards. Ranges picking up. However, rain necessary. Throughout drought areas, cattle fair, good condition due heavy supplemental feeding. Market hold steady. Lambing continues, predators pose problem sheep ranchers. Goat shearing continues. Stocks tanks seriously low.

UTAH: Precipitation light a few scattered stations north half State, none at other stations. Temperature 17° below normal Uintah Basin, 11° below north central, 7° below western and northern mountains, 4° below south central and southeast, normal Dixie Division.

Routine chores major farm activities. Early preparations for lambing and shearing. Some early lambs and calves already on the ground. A few apples and potatoes not sold.

VIRGINIA: Week averaged below normal temperatures and precipitation. Warm at beginning of period. Precipitation and temperature drop cuased by low pressure moving northeast across area with associated frontal system. Temperatures averaged about 5° below normal with extremes, highest in the low 70's in central and southern divisions and lowest in mid to low teens in western and northern divisions.

Topsoil moisture improved to 55% adequate, 45% surplus. Days suitable for fieldwork slipped to 1.4. Wet soils hampered field activities. Land preparation and seeding, topdressing small grains, and other fertilizing and liming were generally behind normal. Tobacco bed seeding active. Livestock continue in good condition with normal losses of calves and lambs. Winter grains and other winter grazing crop and pastures still in good to excellent condition.

WASHINGTON: Week began with narrow high pressure area protecting State; but strong low pressure system centered in Gulf of Alaska brought clouds to most of State and rain west of Cascades on 4th. Moist maritime air flowing around low continued the mostly cloudy skies and periods of rain, light in east, into 1st. High pressure began to build over Pacific Northwest late on 1st and by 2nd, current period of dry, mild weather began.

Field preparation activities reported increasing. Benton County, planting spring wheat and barley beginning. Some aerial application of herbicides and fertilizer being done. There has been some thinning of stands in fall-seeded wheat due to winterkill. Growers starting to work in asparagus and hops fields. Orchard and vineyard pruning about complete. Strawberries in western part of State beginning to put on new growth. Raspberry growers beginning to apply fertilizers as weather permits. Winter cauliflower and seed cabbage fields heavily damaged during unusual cold spells of past winter. Truck gardeners planting lettuce. Calving and lambing continue. Livestock remain in good condition.

WEST VIRGINIA: Average temperature was well below normal Statewide. Greatest departures near 9° below normal in the central and southern divisions. The highest snow fall per day was 15 in. in Canaan Valley. The high temperature was 49° in Huntington and the low 0° at Elkins. Precipitation ranged from 0.20 in. above normal in the northwest and southwest divisions and 0.20 to 0.40 in. below normal elsewhere. The 4th was the only precipitation free day for the entire State.

Soil moisture adequate to surplus. Days suitable for fieldwork averaged 0.9. Main activity: General maintenance. Feed supplies adequate to short.

WISCONSIN: Temperatures averaged near or slightly above normal with a general lack of snow cover over the southeast two thirds of the State, an important contributor to the lack of cold. Precipitation ended up below normal with the week as a whole, dry until a Statewide event developed on the 4th. Precipitation was mainly in the form of snow with heaviest amounts over the northwest third of the State where several inches occurred. In the southeast a coating of snow and ice occurred evening of 4th as wet snow changed to freezing drizzle. The lowest temperature was -8° at Harrison on the 2nd and Lake Thompson on the 3rd. The highest temperature reported 41° at Richland Center on 1st.

Limited fieldwork was reported over scattered parts of the State as farmers took advantage of the lack of snow cover and the hard ground to harvest some of last year's corn and soybeans, spread manure or chop corn stalks for use as bedding. Some plowing was also reported.

WYOMING: Temperatures chilly. Most stations slightly below normal. Precipitation light most stations.

Winter wheat mostly good condition. Additional moisture will be needed for good development of the crop. Livestock mostly good condition with supplemental feeding in areas with snow cover. Early calving, lambing, and shearing underway.

National Weather Summary (continued from front cover)

SATURDAY...A very active frontal system developed throughout the Great Plains, producing widespread precipitation, snow in the eastern Rockies and northern Plains, and showers and thunderstorms in the central Plains and extending into the middle and lower Mississippi Valley. Reinforcing cold weather moved through the northeastern third of the country. Pleasant spring weather blanketed the southern tier of States.

International Weather and Crop Summary

February 26 to March 3

HIGHLIGHTS:

1. UNITED STATES ... A major winter storm produces locally heavy snows in the Corn Belt and rains in the Southeast, halting fieldwork. The storm brings arctic air southward, causing frost in some central Florida vegetable fields and near critical temperatures for peach blooms in Georgia. Abnormal coolness slows wheat growth in the Texas High Plains while winds deplete soil moisture.

2. WESTERN USSR ... Wet weather increases moisture supplies in western Ukraine winter wheat areas. Dry weather continues over eastern winter grain areas.

3. EUROPE ... Widespread showers benefit winter grains in the vegetative stage in Spain. Wet weather continues to improve low-moisture supplies in Italy. Additional precipitation is needed in parts of northeastern Europe to improve moisture supplies for spring growth.

4. SOUTH ASIA ... Dry weather prevails in India. The wheat crop remains in fair to good condition in most areas.

5. EASTERN ASIA ... Most southern rice areas have favorable planting moisture. Dry weather returns to the major wheat region where the crop remains dormant.

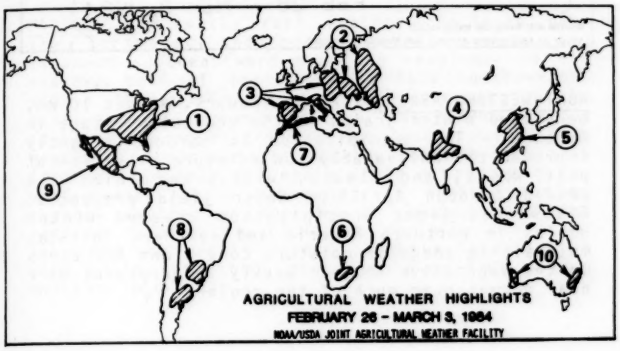
6. SOUTH AFRICA ... Rainfall increases in the Maize Triangle, but it is probably too late to improve the corn yield.

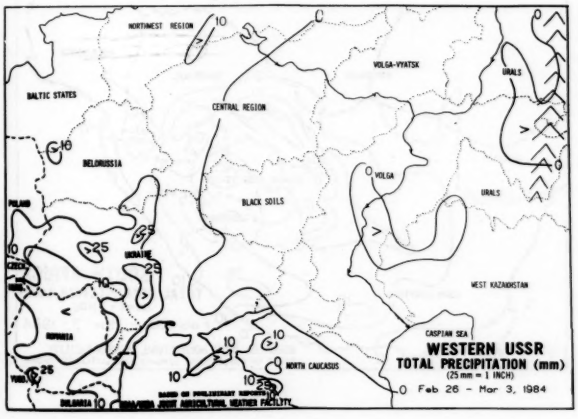
7. NORTHWESTERN AFRICA ... Showers bring limited relief to winter grains in Morocco. Light showers meet current moisture requirements of winter grains in the vegetative stage in Algeria and Tunisia.

8. SOUTH AMERICA ... Heavy rain floods summer crop areas of Argentina, delaying early crop harvesting and adversely affecting the quality of maturing crops. Heavy rain in southern Brazil is replenishing moisture supplies for soybean development. Hot, dry weather continues to stress crops in Parana, and Sao Paulo and vicinity.

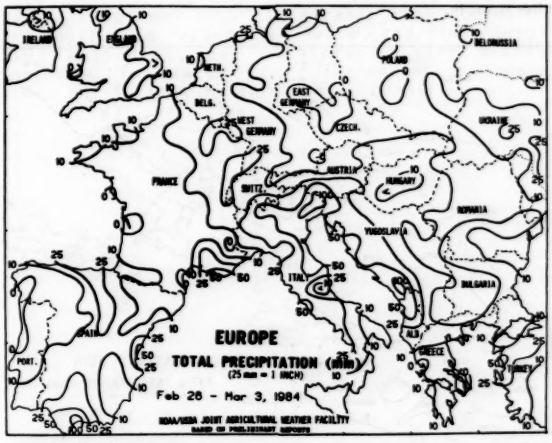
9. MEXICO ... Seasonal sunny, mild weather favors west coast vegetables and early field crops, while abnormal coolness slows the growth of rangeland grasses in the north-central region.

10. AUSTRALIA ... Some beneficial rain helps moisture reserves in crop areas of Western Australia. Summer crop areas of eastern Australia are favorably dry for sorghum and cotton, which are in late growth stages.

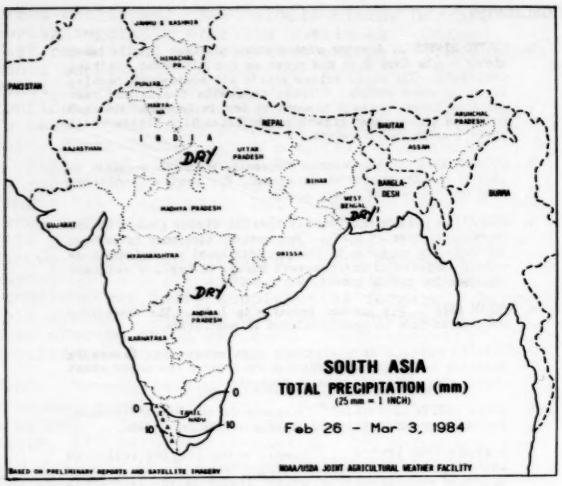




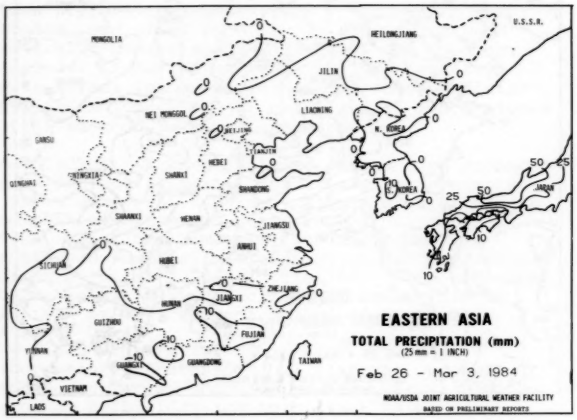
WESTERN USSR...Snow, and mixed rain and snow covered the western and southern Ukraine, further increasing moisture supplies. The western edge of the Siberian high, which has dominated the eastern half of the western USSR since late January, continued to block the approach of storm systems from the west. Consequently, most eastern winter grain areas, except in the Ukraine, remained dry. Storm systems moving across the south brought near-normal precipitation to the Ukraine during the winter. Weekly temperatures were near normal, keeping most winter grains dormant.



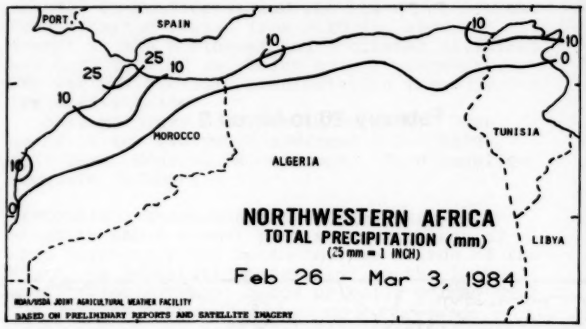
EUROPE...Significant showers, 10-25 mm, covered most winter grains in Spain, improving low-moisture conditions for crops in the vegetative stage. Light precipitation covered winter grains across much of northern Europe, maintaining favorable moisture supplies in western crop areas. Crop areas in Poland, Czeckoslavakia, and Hungary need significant precipitation in upcoming weeks to boost soil moisture supplies for spring growth. Further south, Italy's winter grain areas continued to benefit from wet weather, and light precipitation in the southeast continued near-normal moisture accumulations for the winter. Weekly temperatures were below normal in the west, and above normal in the east.



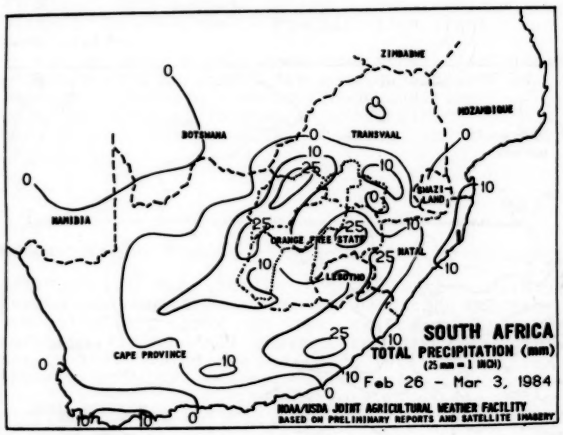
SOUTH ASIA...Seasonally dry weather returned over nearly all of India following timely rains across the major wheat belt last week. Only a few light showers fell in Tamil Nadu and Kerala. Earlier, above-normal rains in southern wheat areas have provided adequate moisture conditions. The wheat crop varies from heading in the far north to late grain filling in the southern areas. Additional rains would be beneficial for the wheat crop, maintaining high yield prospects. The eastern coast of India was dry this week, however, showers during the last few weeks aided summer rice areas. Temperatures remained below normal in northern India, while seasonable temperatures occurred in the south.



EASTERN ASIA...Light showers continued to cover southern China this week. The rainfall was mostly confined to areas south of the Yangtze River. The precipitation is maintaining favorable moisture conditions for early rice planting in most areas. Very light rain (less than 10 mm) fell in Guangdong where accumulations have been below normal this year. Dry weather returned to the winter wheat region, following light showers last week. Temperatures were cooler than normal this week and winter wheat remains dormant to the north of Hubei, Anhui, and Jiangsu. Slow growth is occurring in the Yangtze Valley, and freezing temperatures at midweek may have locally damaged minor wheat areas where the crop had broken dormancy.

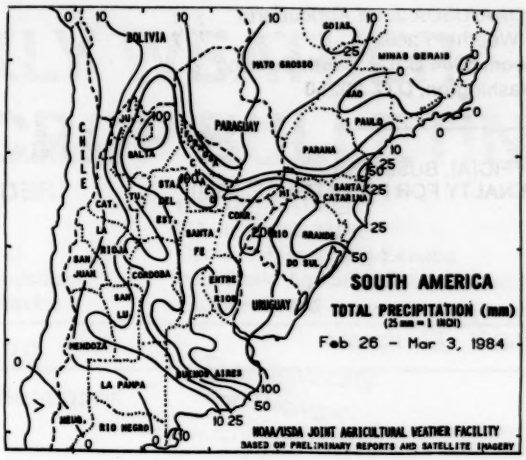


NORTHWESTERN AFRICA...Light showers, around 10 mm, benefited winter grains in the vegetative stage in Morocco. The precipitation in Morocco slightly improved the unfavorably low moisture situation of past weeks, and timely, widespread rains are needed through April to boost yield prospects. Elsewhere, light precipitation covered winter grains in northern Algeria and northern Tunisia, maintaining adequate moisture conditions for crops in the vegetative stage. Weekly temperatures were near normal over much of the region.



SOUTH AFRICA...Showers covered nearly all portions of the Maize Triangle this week. Most of the rain fell early in the week, with the heaviest amounts (up to 42 mm) falling in the western Transvaal and the western Orange Free State. The precipitation will have little impact on corn yields because most of the crop is in the maturing stage. The recent rains increased the soil moisture, improving conditions for wheat planting which normally begins in early April. Slightly cooler temperatures accompanied the rains, but unfavorably warm conditions returned later in the week. Light showers fell in the Natal sugar region which has suffered from periods of excessive rain.

MEXICO...Abnormally cool weather continued over the northeast and north-central areas, and expanded southeastward over the remainder of the eastern half of the nation. This considerably slowed the growth of rangeland grasses in the north-central region, and to a less extent limited the development of crops in the east. Sunny skies generally dominated the country, and particularly favored vegetable and early field crops along the west coast. Rain was primarily limited to the coastal section of the Bay of Campeche and the eastern Yucatan Peninsula to northern Honduras. The rain was mostly light, slightly interferring with field activities, but supplying some needed moisture for crops.



SOUTH AMERICA...Heavy rain (greater than 50 mm) fell over summer crop areas of eastern Argentina early in the week, and spread into Uruguay and much of Rio Grande do Sul later in the week. The persistent wetness in recent weeks has saturated Argentina's corn, sorghum, and sunflower areas, flooding fields and delaying early summer crop harvesting. Excessive rains also covered the northeastern cotton areas where the crop is maturing. Dry weather is needed throughout Argentina for maturing and harvesting of crops. The heavy rain in western Rio Grande do Sul replenished moisture supplies for late maturing soybeans. Harvesting of early maturing soybeans normally begins during mid-March in the south, but, further north, about seven percent of Parana's soybean crop has already been harvested. Dry weather in Parana, Sao Paulo, and Minas Gerais aided ripening, but unfavorably warm weather continued to stress crop development. Showers aided pod filling in Mato Grosso do Sul.

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